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The

Official Year Book  
of

New South Wales.

1935-36.



T. WAITES.

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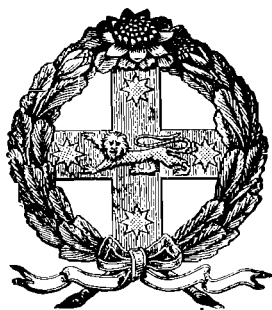
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THE  
OFFICIAL YEAR BOOK  
OF  
NEW SOUTH WALES.  
1935-36.



**PREFACE AND INDEX.**

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T. WAITES, O.B.E.  
GOVERNMENT STATISTICIAN.

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NEW SOUTH WALES.**

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## PREFACE.

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THIS is the forty-third issue of the Official Year Book, which from the first issue in 1886 to 1904 was known as the "Wealth and Progress of New South Wales."

In order to render as prompt service as possible, the contents of the volume have been published already in eight parts, as they became available from the printer since July, 1937. Each part contains the latest information available at the time it was sent to press. Much of the text, therefore, relates to the year 1937.

Every care has been taken to keep the work free from errors, but if any be observed by readers, notification regarding them would be appreciated.

With the volume is published a diagram map of New South Wales showing railways, land and statistical divisions, shire boundaries, and limits of the wheat belt. The boundaries of the statistical divisions (as adopted in 1923) coincide with those of Shires because it is thought desirable that statistics generally should be compiled with the local governing area as the geographical unit. The text has been illustrated with a number of graphs and diagrams.

The "Statistical Register of New South Wales," published annually from this Bureau, will prove serviceable to those who wish to obtain more details regarding the matters treated generally in this Year Book. The "Statistical Bulletin," issued quarterly, and the "Monthly Summary of Business Statistics" published monthly, contain a summary of the latest available statistics of the State.

My thanks are tendered to the responsible officers of the various State and Commonwealth Departments, and to others who have kindly supplied information, often at considerable trouble.

Finally, I wish to express my appreciation of the services rendered by those officers of the Bureau who have been associated with me in the preparation of this volume.

T. WAITES,  
Government Statistician.

Bureau of Statistics and Economics,  
Sydney, 4th February, 1938.

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## GEOGRAPHY.

**N**EW SOUTH WALES is situated entirely in the temperate zone of the Southern Hemisphere, and is on the opposite side of the world from the seat of the British Empire, of which it forms a part. It is distant from London 11,200 miles by the Suez Canal—the shortest shipping route.

The name "New South Wales" was given to the eastern part of Australia (then known as New Holland) on its discovery by Captain Cook in 1770, and for fifty-seven years all Australian territory east of longitude 135° east was known by that name. In 1825, shortly after the separation of Tasmania (Van Diemen's Land), the western boundary was moved to longitude 129°. The steps by which the territory of the State assumed its present boundaries and dimensions are shown below:—

Date.	Nature of Territorial Adjustment.	Area involved in adjustment.	Area of New South Wales after adjustment §	Population of Territory known as New South Wales at end of year.
		sq. miles.	sq. miles.	
1788	New South Wales defined as whole of Australasia east of longitude 135° east.*	...	1,584,389	1,024 (26th Jan.).
1825	Tasmania practically separated from New South Wales.	26,215	1,558,174	} 33,500†
1825	Western boundary of New South Wales moved to longitude 129° east.	518,134	2,076,308	
1836	South Australia founded as a separate colony.	309,850	1,766,458	78,929
1841	New Zealand proclaimed a separate colony...	103,862	1,662,596	145,303
1851	Victoria proclaimed a separate colony ...	87,884	1,574,712	197,265
1859	Queensland proclaimed a separate colony ...	554,300	1,020,412	327,459
1861-3	Northern Territory and territory between longitude 129° and 132° east separated.	710,040	310,372	377,712
1911	Federal Capital Territory ceded to Commonwealth.	912	309,460	1,701,736
1915	Territory at Jervis Bay ceded to Commonwealth.	28	309,432	1,895,603

\* Literally interpreted, the boundaries defined included Fiji, Samoa, and some neighbouring islands.

† Approximate. § Exclusive of area of Pacific Islands, except New Zealand.

The area of New South Wales in the years 1788 to 1841, as shown above, is approximate only.

## BOUNDARIES AND DIMENSIONS.

The present boundaries of New South Wales are as follow:—On the east the South Pacific Ocean from Point Danger to Cape Howe; on the west, the 141st meridian of east longitude; on the north, the 29th parallel of south latitude, proceeding east to the Barwon River, and thereafter along the Macintyre and Dumaresq Rivers to the junction with Tenterfield Creek; thence along the crest of a spur of the Great Dividing Range, the crest of that range north to the Macpherson Range, and along the crest of the

Macpherson Range east to the sea; on the south, the southern bank of the Murray River to its source at the head of the river Indi, and thence by a direct marked line to Cape Howe.

From Point Danger, along a diagonal line, to the south-west corner of the State—a distance of 850 miles—the greatest dimension of the State is found. The length of coast, measured direct from Point Danger to Cape Howe, is 683 miles, the actual length of seaboard being 907 miles. The greatest breadth, measured along the 29th parallel of latitude, is 756 miles. The shortest dimension, along the western boundary, is about 340 miles.

#### AREA.

The total area of New South Wales, including Lord Howe Island, but excluding the Federal Territory, is 309,432 square miles, or 198,036,480 acres, being rather more than one-tenth of the area of Australia. About 4,639 square miles, or 2,969,080 acres, of the total surface are covered by water, including 176 square miles, or 112,750 acres, by the principal harbours. The area of Lord Howe Island is 5 square miles.

The area of New South Wales in relation to the total area of Australia is shown in the following statement:—

State or Territory.	Area.	Per cent. of total Area.
	sq. miles.	
New South Wales ... ..	309,432	10·40
Victoria ... ..	87,884	2·96
Queensland ... ..	670,500	22·54
South Australia ... ..	380,070	12·78
Western Australia ... ..	975,920	32·81
Tasmania ... ..	26,215	·88
Northern Territory ... ..	523,620	17·60
Federal Capital Territory ... ..	912	·03
Federal Territory at Jervis Bay ... ..	28	·00
Commonwealth ... ..	2,974,581	100·00

New South Wales is approximately three and a half times as large as Victoria, nearly twelve times as large as Tasmania, and one-fifth smaller than South Australia. Queensland is more than twice and Western Australia three times as large as New South Wales.

The following table shows the extent of the State of New South Wales and of the Commonwealth of Australia in comparison with the total area of all countries of the world, the British Empire, and certain individual countries:—

Country.	Area.	Ratio of Area to Area of New South Wales.	Ratio of Area to Area of Australia.
	sq. miles.		
New South Wales ... ..	309,432	1·000	·104
Commonwealth... ..	2,974,581	9·613	1·000
Great Britain ... ..	89,041	·288	·030
Canada ... ..	3,729,665	12·053	1·254
Argentina ... ..	1,153,119	3·729	·388
United States ... ..	3,026,789	9·782	1·018
British Empire ... ..	13,257,584	42·845	4·456
The World ... ..	52,055,879	168·231	17·600

## LORD HOWE ISLAND.

Lord Howe Island is a dependency of New South Wales, and, for the purpose of representation in the State Parliament, is included in King, one of the metropolitan electorates. It is situated about 300 miles east of Port Macquarie and 436 miles north-east of Sydney. The island was discovered in 1788; it is of volcanic origin, and Mount Gower, the highest point, reaches an altitude of 2,840 feet. The climate and soil are favourable to the growth of subtropical products, but on account of the rocky formation of the greater part of the surface of 3,220 acres, only about 300 acres are arable. The land has not been alienated, and is occupied rent free on sufferance, being utilised mainly for the production of *Kentia* palm seed. A Board of Control at Sydney manages the affairs of the island and supervises the palm seed industry. At the Census of 1933 the population numbered 161 persons.

## PHYSICAL FEATURES.

An outline of the physiography of the State was published on pages 3 to 9 of the Official Year Book for 1929-30. More particular reference to the distribution of industries and settlement will be found in the chapter "Rural Settlement" of this or previous issues of the Year Book and in the chapters relating to individual industries. A map showing the distribution of rainfall, rural population, and the principal industries was published at page 728 of the Year Book for 1924, and a discussion of the trend in the distribution of population as revealed by statistics available from the census of 1933 will be found in the chapter "Population" of the Year Book for 1934-35.

*Size of Rivers.*

Steps were taken in 1926 by the Lands Department of New South Wales to compute the lengths of the principal rivers on a uniform basis. Considerable data were obtained from the results of surveys of the greater part of the Murray, Darling, Murrumbidgee and Lachlan Rivers, and the remainder of the lengths were carefully measured on the standard parish maps. In every case the starting point was the furthest source of the river. The lengths as determined were as follow:—

Inland Rivers.		Length.	Coastal Rivers.		Length.	Coastal Rivers.		Length.
		miles.			miles.			miles.
Murray	...	1,609*	Tweed	...	50	Wollom̄ba	...	46
Darling	...	1,702†	Richmond	..	163	Hunter	...	287
Murrumbidgee	...	981	Clarence	...	245	Hawkesbury ‡	...	293
Lachlan	...	922	Bellingen	...	68	Shoalhaven	...	206
Bogan	...	451	Nambucca	...	69	Clyde	...	67
Macquarie	...	590	Macleay	...	250	Moruya	...	97
Castlereagh	...	341	Hastings	...	108	Tuross	...	91
Namoi	...	526	Camden Haven	...	33	Bega	...	53
Gwydir	...	415	Manning	...	139	Towamba	...	57

\* 1,203 miles within New South Wales. † 1,026 miles within New South Wales. ‡ And main tributary.

The relative magnitude of rivers as shown by the average annual volume of water which they carry may be ascertained in respect of some of the more important streams from the records of river gaugings, extending in some cases back to 1885.

The following comparison is based on the records of the period 1905-1936:—

River.	Gauging Station.	Distance from Source of River.	Drainage Area.	Average Annual Run off of Water.
		miles.	sq. miles.	acre-feet.
Murray*	Tocumwal ...	435	10,160	5,096,600
Murrumbidgee*	Wagga Wagga ...	396	10,700	2,905,880
Darling	Menindie ...	1,383	221,700	1,509,850
Macquarie	Narrowmine ...	313	10,090	659,230
Lachlan...	Condobolin ...	380	10,420	466,270
Namoi ...	Narrabri ...	302	9,820	508,320

\*The operation of the Hume and Burrinjuck Storages affected the natural run-off from the Catchment Areas at Tocumwal and Wagga Wagga since 1929 and 1914 respectively.

In making the comparison, gauging stations have been selected with drainage areas of approximately equal extent, except in the case of the Darling. The range of choice has been limited by the number of stations with available records. In the case of the Lachlan River the average run-off at Forbes, 120 miles above Condobolin, is 625,491 acre-feet per annum. Similar particulars are not available in respect of coastal rivers, except the Hunter, which at Singleton has a draining area of 6,580 square miles and an average annual run-off of 627,610 acre-feet of water. An acre-foot of water is such a quantity as would cover an acre of land to a uniform depth of one foot.

#### TOURIST RESORTS.

Throughout the tablelands and coastal districts of New South Wales there are many pleasure resorts, centres of striking scenic beauty, and some remarkable examples of natural phenomena. It is not possible in this work to describe these in any detail, but in the succeeding paragraphs some of the more outstanding places of interest are indicated in barest outline.

Port Jackson, the harbour of the metropolis, is famed for the unrivalled shipping facilities which it affords, as well as for its natural beauty, which is in no sense impaired by the great arch of the Sydney Harbour Bridge, spanning one of its many arms, and noted as one of the world's greatest engineering achievements.

Not many miles to the north of Sydney, the Hawkesbury River provides such scenery that it is regarded as one of the most beautiful waterways of the world and has appropriately been compared to the Rhine in Europe. A panorama of surpassing beauty is unfolded from Sublime Point on the South Coast (also within a short journey of Sydney), where many miles of scalloped coastline and sandy beaches contrast with the wooded and fern-strewn mountain-sides fringing the coast. Nearer the city, the National Park furnishes a fine opportunity to view the typical Australian bush scenery in a charming setting.

The Blue Mountains enjoy great popularity with the Australian tourist. Here scenery of rugged grandeur is displayed, and throughout huge wooded valleys there are charming waterfalls and cascades, and pretty fern groves and bowers. But perhaps the most unique attraction to the visitor from this and other lands is the remarkable series of limestone caves at Jenolan in the central tablelands, about 120 miles from Sydney. These caves

contain the most wonderful dripstone formations, with stalactites and stalagmites, unrivalled in delicacy and grandeur of structure, in great diversity. Caves containing similar geological phenomena are found also at Wombeyan and Yarrangobilly elsewhere in the tablelands.

The model city of Canberra, the Capital of the Commonwealth of Australia, is situated in the hills fringing the Monaro Plains. It is a city in the making, with development at a stage where the impression is one of present beauty, with the prospect of even greater beauty as development proceeds.

The Government Tourist Bureau, which freely issues literature and detailed information concerning resorts and travel throughout the State, provides a complete and efficient service to the visitor, arranging itineraries and accommodation as required.

## CLIMATE.

---

**N**EW South Wales is situated entirely in the temperate zone, and its climate is generally mild and equable, and mostly free from extremes of heat and cold, but occasionally very high temperatures are experienced in the north-west and exceptionally cold temperatures on the southern tablelands. Abundant sunshine is experienced in all its seasons. On an average the capital city is without sunshine on only twenty-three days per year, and the average range of temperature between the hottest and coldest months is only about 19° Fahr. In the hinterland there is even more sunshine, and the range of temperature is greater, but observations with the wet bulb thermometer show that the temperature is not maintained at so high a level as to be detrimental to the health and physique of persons engaged in outdoor labour in any part of the State.

Practically the whole of New South Wales is subject to the bracing influence of frosts during five or more months of the year. Snow has been known to fall over nearly two-thirds of the State, but its occurrence is comparatively rare except in the tableland districts. Perennial snow is found only on the highest peaks of the southern tableland.

The seasons are not so well defined in the western interior as on the coast. They are generally as follows:—Spring during September, October, and November; summer during December, January, and February; autumn during March, April, and May; winter during June, July, and August.

### *Meteorological Observations.*

Meteorological services are a federal function administered by a Bureau, a branch of the Department of the Interior. A Divisional Meteorologist in Sydney directs observations throughout the State of New South Wales. Climatological stations are established at a number of representative towns, and rainfall recording stations at most centres.

Weather observations are telegraphed daily from many stations to the Meteorological Bureau, Sydney, where bulletins, rain maps and isobaric charts are prepared and issued for public information. Weather forecasts for the State, sections of the State and the metropolitan area are prepared daily, telegraphed to country centres and disseminated through the press and broadcasting stations. Forecasts of conditions over the ocean and for aviation purposes are also issued daily. On request, detailed forecasts of conditions likely to affect any particular area or function can be obtained from the Divisional Meteorologist and, if required, the advice will be telegraphed on payment of the cost of the message.

When occasion warrants, flood and storm warnings are issued to the press, broadcasting stations and to public departments, enabling precautions to be taken wherever possible.

Particulars of meteorological observations at various stations in New South Wales are published annually in the Statistical Register of New South Wales.

### *Winds.*

The weather in New South Wales is determined chiefly by anticyclones, or areas of high barometric pressure, with their attendant tropical and Southern depressions. The anticyclones pass almost continually across the face of the continent of Australia from west to east. A general surging movement occasionally takes place in the atmosphere, sometimes towards, and sometimes from, the equator. The movement causes sudden changes in the weather—heat when the surge is to the south, and cold weather when it moves towards the equator.

New South Wales is fairly free from cyclonic disturbances, although occasionally a cyclone may result from an inland depression, or may reach the State from the north-east tropics or from the Southern low-pressure belt which lies to the south of Australia. In the summer months the prevailing winds on the coast of New South Wales blow from the north-east and extend to the highlands; in the western districts the winds are usually from the south. Southerly changes are characteristic of the summer weather on the coast. These winds, which blow from the higher southern latitudes, cause a rapid fall in temperature, and are sometimes accompanied by thunderstorms.

During winter, the prevailing direction of the wind is westerly. In the southern areas of the State the winds are almost due west, but proceeding northwards there is a southerly tendency. Australia lies directly in the great high-pressure belt during the cold months of the year.

### *Rainfall.*

Rainfall in New South Wales is associated mainly with two types of depression—tropical and Southern. The amount of rainfall varies very greatly over the wide expanse of territory, the average decreasing from about 80 inches per annum in the north-eastern corner to less than 7 inches in the north-western corner. Rainfall exerts a very powerful influence in determining the character of settlement, but its effects can be gauged only in a general way from annual averages as to quantity because consideration must be given also to other important factors such as seasonal distribution and reliability.

The coastal districts receive the largest annual falls, ranging from an average of 30 inches in the south to about 80 inches in the extreme north. Despite their proximity to the sea, the mountain chains are not of sufficient elevation to cause any great condensation; so that, with slight irregularities, the average rainfall gradually diminishes towards the north-western limits of the State.

An approximate classification of areas in New South Wales (including the Federal Territory) in accordance with the average annual rainfall shows the following distribution:—

Annual Rainfall.	Area.		Proportion per cent. of total area.	Annual Rainfall.	Area.		Proportion per cent. of total area.
	Sq. Miles.	Aeres.			Sq. Miles.	Aeres.	
inches. Over 70	365	233,600	·1	inches. 20 to 30	75,679	48,434,560	24·4
60 to 70	1,669	1,068,160	·5	15 to 20	55,762	35,687,680	18·0
50 to 60	4,620	2,956,800	1·5	10 to 15	78,454	50,210,560	25·3
40 to 50	11,517	7,370,880	3·7	Under 10	48,749	31,199,360	15·7
30 to 40	33,557	21,476,480	10·8	Total ..	310,372	198,638,080	100·0

Approximately 41 per cent. of the area of the State receives rains exceeding on the average 20 inches per year. Over the greater part of the State the annual rainfall varies on the average between 20 per cent. and 35 per cent. from the mean, but in the south-eastern corner the degree of variation is less and in the north-western quarter it is more. Protracted periods of dry weather in one part or another are not uncommon, but simultaneous drought over the whole territory of the State has been experienced only very rarely.

The seasonal distribution of rainfall may be described as follows: A winter rain region, which includes the southern portion of the Western Plains and about two-thirds of the Riverina, is bounded on the north by a direct line from Broken Hill to Wagga with a curve around Albury. A summer rain region, including the whole of the northern subdivisions, is bounded on the south by a line which waves regularly, first south and then north of a direct line from the north-western corner of the State to Newcastle. Between these there extends a region, including the central and south-eastern portions of the State where the rains are distributed fairly evenly throughout the year, but a narrow coastal strip between Nowra and Broken Bay receives its heaviest rains in the autumn.

The chief agencies causing rainfall are southern depressions, tropical depressions, and anticyclonic systems. Southern depressions are the main cause of the good winter rains in the Riverina and on the Southern Highlands. A seasonal prevalence of this type of weather would cause a low rainfall on the coast, and over that portion of the inland district north of the Lachlan River. A tropical prevalence ensures a good season inland north of the Lachlan, but not necessarily in southern areas. An anticyclonic prevalence results in good rains over coastal and tableland districts, but causes dryness west of the mountains.

The distribution of rainfall is dependent on three factors—the energy present in the atmospheric systems; the rate of movement of the atmospheric stream, and the prevailing latitudes in which the anticyclones are moving.

A map published on page 728 of the 1924 edition of this Year Book shows diagrammatically the distribution of rainfall in New South Wales.

*Records of Rainfall.*

Records of monthly rainfall at individual stations in New South Wales are published in the Statistical Register of New South Wales annually. Detailed records over a period of years are contained in the Statistical Register for 1924-25, and for the years 1915 to 1934 in the Statistical Register for 1934-35.

Summary tables indicating the average rainfall of the principal districts of New South Wales are published below. The first table shows the mean of the amount of rainfall registered at recording stations in each of thirty topographical divisions of New South Wales during each of the past ten years in comparison with the normal rainfall for each division calculated over a long period of years. The second table shows the mean monthly averages or normal rainfall in each division on the basis of the actual rainfall recorded at the various stations over a long period of years. These tables indicate in some degree the variability of annual rainfall in various parts of the State as well as the seasonal and divisional distribution.

*Annual Rainfall in Divisions.*

Division.			Normal Rain- fall, in inches.	Mean District Rainfall (in inches) in Year—									
				1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Coast—													
North ...	...	N	56.60	68.97	54.58	66.61	66.04	68.10	34.11	66.64	67.65	48.64	41.77
		S	57.84	60.13	67.27	77.58	58.99	55.08	41.47	78.53	69.07	50.04	46.35
Hunter and Manning		N	53.28	60.27	46.66	84.22	68.31	51.78	48.88	61.02	63.81	44.05	39.72
		S	35.55	39.69	34.45	39.78	39.02	42.50	30.35	33.68	30.26	23.60	27.52
Metropolitan Area	...	N	43.06	48.22	37.83	51.21	41.79	48.35	33.46	41.92	60.85	50.63	30.97
Balance of Cumberland		N	30.41	28.76	25.87	37.57	25.19	37.24	25.56	33.61	38.54	23.93	27.47
South ...	...	N	42.12	42.07	43.95	52.63	38.83	45.58	34.59	39.66	66.47	33.56	31.32
		S	36.24	39.33	37.35	44.54	32.68	29.86	35.85	40.42	70.54	33.83	36.71
Tablelands—													
North ...	...	E	38.28	46.84	49.95	37.05	42.50	39.64	28.10	51.18	43.09	31.75	30.42
		W	31.80	27.48	36.82	30.06	20.96	41.30	29.08	39.53	37.57	24.21	27.99
Central	...	N	25.73	20.21	26.40	18.44	28.25	28.37	23.88	25.36	31.31	20.05	27.01
		S	34.62	32.33	36.12	35.59	34.12	42.26	30.17	35.81	45.35	29.70	33.66
South ...	...	S	24.86	22.21	24.55	26.51	20.69	27.21	24.08	22.60	41.33	26.94	28.24
Kosciusko Plateau...		N	33.91	31.96	36.07	32.17	32.86	37.64	39.20	33.66	49.89	34.39	37.15
Western Slopes—													
North ...	...	N	26.99	24.29	26.55	24.94	28.72	35.28	22.09	30.94	30.61	18.35	21.89
		S	26.10	19.20	27.85	19.76	24.58	30.81	22.03	32.31	28.55	18.77	25.37
Central	...	N	24.41	17.50	22.65	17.61	26.87	30.73	20.70	27.32	28.78	17.51	24.97
		S	22.85	18.29	21.73	17.50	23.24	30.37	21.44	21.07	29.94	18.88	25.64
South ...	...	N	22.82	17.77	25.11	17.98	20.99	33.79	21.71	20.92	30.42	19.21	27.38
		S	30.35	21.34	26.84	21.29	28.41	42.56	31.24	27.50	38.55	31.49	35.01
Plains—													
North ...	...	E	23.18	17.22	22.01	20.61	20.23	30.51	18.37	24.85	26.54	15.30	17.05
		W	19.66	18.49	17.39	12.53	18.83	26.08	14.67	21.59	23.32	11.38	16.66
Central	...	N	18.22	12.82	16.47	9.35	20.66	25.92	14.90	17.57	24.19	10.98	21.40
		S	18.02	15.64	22.95	12.63	18.78	24.63	16.79	16.13	22.92	13.06	23.41
Riverina	...	E	18.33	11.60	20.00	14.07	19.26	24.83	18.16	18.13	24.61	17.73	20.53
		W	13.84	8.41	13.76	11.38	16.11	19.21	15.36	14.53	15.85	10.45	16.19
Western Division—													
Eastern half ...	...	N	13.53	9.51	10.57	5.69	14.14	18.37	9.96	15.33	12.90	6.86	18.94
		S	13.27	7.05	13.34	9.27	14.69	16.19	13.77	13.11	14.07	8.33	19.21
Western half ...	...	N	8.44	4.37	7.74	4.00	12.13	11.37	9.78	7.58	6.44	5.79	15.37
		S	10.04	4.66	8.90	6.13	9.45	12.06	10.45	9.79	7.06	5.19	10.49

NOTE.—The main divisions (Coast, Tablelands, Slopes and Plains), divided into Northern, Central and Southern sections, refer to areas delineated on the map forming the frontispiece of this Year Book. For purposes of this table these are again subdivided into northern and southern or eastern and western sectors indicated above by the letters "N," "S," "E," or "W" respectively.

*Mean Monthly Rainfall in Divisions.*

Division.			Normal Monthly District Rainfall (in inches) Period ended 1935.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Coast—</b>														
North	...	...	N 6·07	6·68	7·14	5·91	5·43	4·09	3·88	2·59	2·72	2·88	3·80	4·81
			S 6·14	6·91	7·04	6·75	5·08	4·38	3·90	2·34	3·14	3·44	3·77	4·06
Hunter and Manning			N 4·68	5·86	5·52	5·84	5·02	4·27	4·48	2·95	3·52	3·08	3·41	4·65
			S 3·12	3·28	3·56	3·47	2·60	2·93	3·35	2·13	2·60	2·29	2·47	3·51
Metropolitan Area	...	...	S 3·55	3·43	4·06	5·50	4·65	3·36	4·55	2·19	2·87	2·71	2·59	3·49
Balance of Cumberland	...	...	S 3·02	2·95	3·24	2·94	2·40	2·15	2·87	1·07	1·88	2·02	2·33	2·94
South	...	...	N 3·90	3·69	4·15	4·30	3·94	3·81	4·30	2·40	2·69	2·64	2·62	3·59
			S 3·84	3·59	3·71	3·23	3·31	3·24	2·84	1·96	2·49	2·56	2·44	3·03
<b>Tablelands—</b>														
North	...	...	E 5·28	5·09	4·74	3·10	2·26	2·34	2·07	1·29	1·88	2·50	3·40	4·33
			W 3·92	2·98	2·78	1·90	1·72	2·55	2·23	1·91	2·22	2·80	3·10	2·69
Central	...	...	N 2·41	2·10	2·21	1·87	1·79	2·42	1·98	1·90	1·99	2·14	2·28	2·64
			S 3·36	3·13	3·29	2·83	2·51	3·12	3·01	2·41	2·50	2·62	2·68	3·17
South	...	...	S 2·44	2·02	2·12	1·77	1·91	2·28	2·10	1·81	1·94	2·16	1·97	2·34
Koselusko Plateau	...	...	...	2·75	2·36	2·54	2·18	2·67	3·40	2·99	2·85	3·26	2·69	2·87
<b>Western Slopes—</b>														
North	...	...	N 3·23	2·57	2·43	1·80	1·69	2·14	1·96	1·54	1·75	2·33	2·54	3·01
			S 2·82	2·32	2·26	1·70	1·53	2·30	1·91	1·79	1·85	2·19	2·47	2·99
Central	...	...	N 2·36	2·26	2·15	1·85	1·64	2·19	2·08	1·64	1·71	1·80	2·15	2·57
			S 2·08	1·62	1·86	1·80	1·72	2·30	1·91	1·88	1·80	1·88	1·80	2·20
South	...	...	N 1·81	1·41	1·76	1·76	1·80	2·58	2·15	2·07	1·91	1·96	1·68	1·94
			S 1·90	1·63	2·26	2·18	2·55	3·89	3·09	3·16	2·66	2·82	2·06	2·14
<b>Plains—</b>														
North	...	...	E 2·58	2·30	2·21	1·52	1·59	2·06	1·75	1·30	1·46	1·68	2·12	2·61
			W 2·28	2·08	1·83	1·30	1·40	1·81	1·41	1·04	1·12	1·36	1·76	2·26
Central	...	...	N 1·78	1·60	1·59	1·55	1·34	1·74	1·43	1·26	1·22	1·28	1·57	1·86
			S 1·60	1·39	1·41	1·55	1·42	1·91	1·51	1·44	1·36	1·39	1·33	1·70
Riverina	...	...	E 1·23	1·20	1·37	1·40	1·59	2·20	1·65	1·76	1·61	1·70	1·31	1·32
			W 0·96	0·91	1·00	1·04	1·33	1·65	1·17	1·23	1·16	1·21	1·05	1·13
<b>Western Division—</b>														
Eastern half	...	...	N 1·42	1·41	1·20	0·92	1·05	1·25	0·90	0·77	0·83	1·00	1·25	1·52
			S 1·01	1·62	1·02	0·93	1·19	1·44	1·06	1·15	1·09	1·11	1·02	1·23
Western half	...	...	N 0·76	0·87	0·74	0·58	0·70	0·84	0·53	0·51	0·54	0·73	0·68	0·96
			S 0·64	0·80	0·69	0·70	1·04	1·16	0·74	0·90	0·85	0·87	0·83	0·82

NOTE—For description of divisions see footnote to previous table.

## EVAPORATION.

The rate of evaporation is influenced by the prevailing temperature and by the atmospheric humidity, pressure, and movement. In New South Wales evaporation is of more than ordinary significance, because in the greater part of the inland districts water for use of stock is generally conserved in open tanks and dams. The amount of evaporation is thus a climatic factor second only in importance to rainfall. Actual measurements of the loss by evaporation have been made at a number of stations, and the average monthly evaporations over a period of years is shown below, together with the average monthly rainfall over the same period. The total annual loss by evaporation varies from under 40 inches on the Coast and Southern Tablelands to about 90 inches in the West. In the far north-western corner of the State, for which actual records are not available, the total loss from evaporation is probably equal to nearly 100 inches per year.

*Average Evaporation in inches measured by loss from exposed water,  
with rainfall over same period.*

Station.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Year.
	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.
Wilcannia—													
Evaporation ...	9 46	7 85	7 15	4 92	2 87	1 84	1 91	2 86	4 35	6 25	7 41	8 86	65 73
Rainfall ...	0 79	1 15	0 57	0 56	0 86	0 93	0 68	0 58	0 58	0 81	0 82	1 32	9 65
Walgett—													
Evaporation ...	7 14	6 02	5 51	3 70	2 46	1 70	1 69	2 51	3 60	5 06	6 25	6 89	52 53
Rainfall ...	2 32	1 48	1 58	1 13	1 25	1 54	1 44	0 98	0 88	1 33	1 46	2 21	17 60
Coonamble—													
Evaporation ...	11 31	9 40	8 85	6 10	4 19	2 43	2 36	3 15	5 03	8 25	10 06	11 27	82 40
Rainfall ...	2 17	1 40	1 71	1 14	1 08	1 34	1 15	0 84	1 13	0 71	2 23	2 27	17 17
Leeton—													
Evaporation ...	8 73	6 86	5 69	3 18	2 01	1 26	1 16	1 47	2 54	4 19	6 39	7 88	51 36
Rainfall ...	1 23	0 91	0 93	1 37	1 30	1 92	1 50	1 62	1 49	1 47	1 36	1 41	16 51
Umberumberka—													
Evaporation ...	12 89	10 90	9 32	6 00	4 05	2 82	2 87	4 12	5 92	8 67	10 23	12 68	89 87
Rainfall ...	0 35	0 64	0 53	0 41	0 86	0 81	0 59	0 52	0 70	0 50	0 99	0 61	7 60
Burrenjack Dam—													
Evaporation ...	5 92	4 88	4 12	2 33	1 13	0 66	0 65	1 03	1 90	2 90	4 24	5 19	35 04
Rainfall ...	1 94	1 91	2 20	2 52	2 90	4 36	4 15	3 96	2 76	2 97	2 19	2 37	34 23
Canberra—													
Evaporation ...	7 44	5 73	4 46	2 65	1 73	1 62	1 16	1 69	2 79	4 11	5 60	6 65	45 03
Rainfall ...	2 19	1 79	2 25	1 84	1 30	2 16	2 16	2 21	1 54	2 54	1 97	2 03	24 04
Sydney—													
Evaporation ...	5 38	4 24	3 66	2 64	1 84	1 45	1 53	1 96	2 73	3 92	4 65	5 39	39 39
Rainfall ...	3 57	3 40	4 73	5 00	4 94	4 36	4 94	2 72	2 78	2 85	2 57	3 24	45 10

#### CLIMATIC DIVISIONS.

The territory of New South Wales may be divided into four climatic divisions, which correspond with the terrain—the Coast, the Tablelands, the Western Slopes of the Dividing Range, and the Western Plains.\*

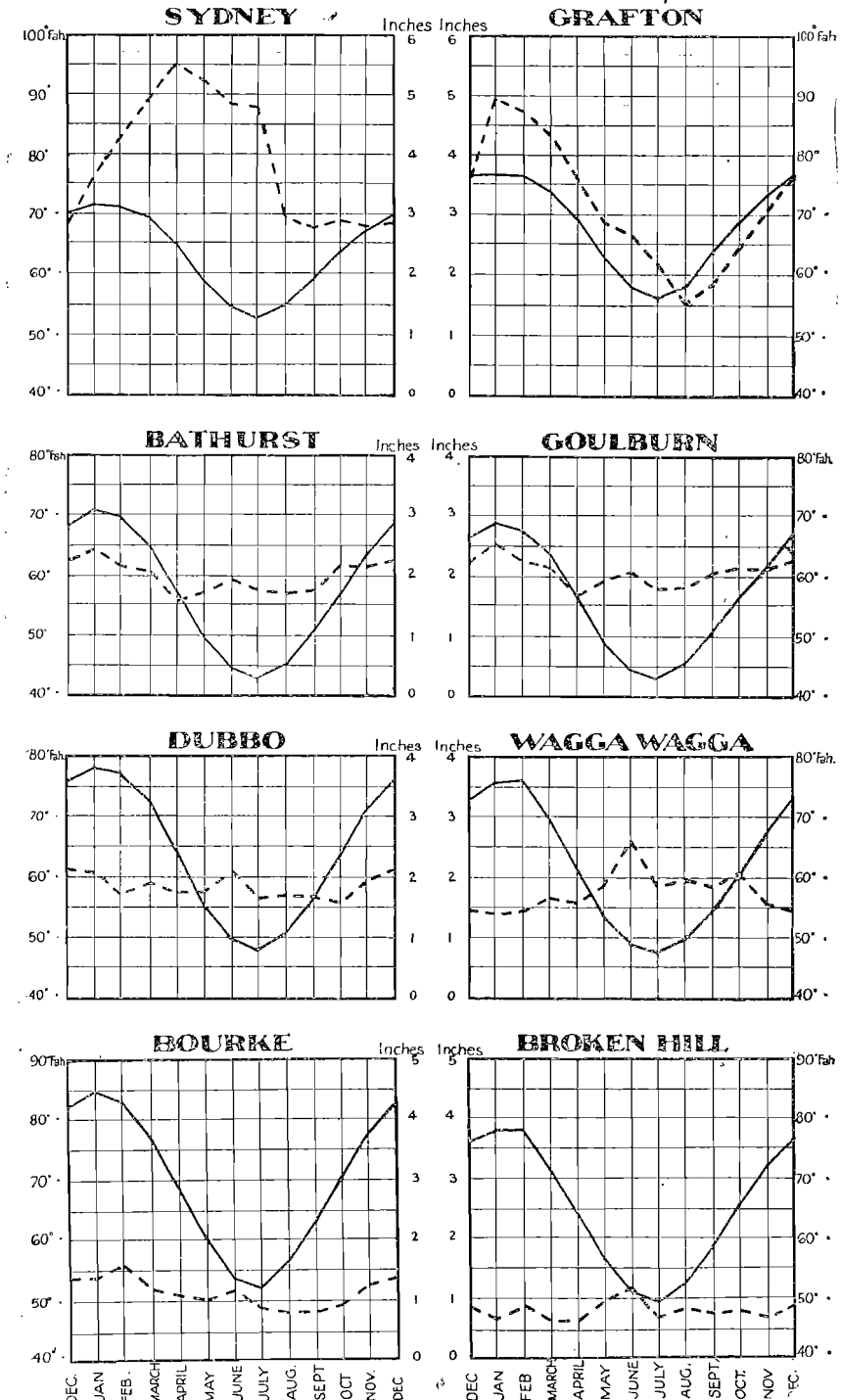
The northern parts of the State are generally warmer than the southern, the difference between the average temperatures of the extreme north and south being about 7° on the coast, 5° on the tablelands, and 7° on the slopes and plains. It should be noted, however, that the length of the State decreases from nearly 700 miles on the coast to about 340 miles on the western boundary. From east to west the average mean annual temperatures vary little except where altitudes are different, but usually the summer is hotter and the winter colder in the interior than on the coast. Thus at Sydney the average temperatures range from 71° in summer to 54° in winter, as compared with 76° in summer and 52° in winter at Wentworth in the same latitude in the western interior. Similar variations are found in the north. The mean daily range at any station is seldom more than 30° or less than 13°.

#### *Coastal Division.*

In the Coastal Division, which lies between the Pacific Ocean and the Great Dividing Range, the average rainfall is comparatively high and regular, and the climate, though more humid, is generally milder than in the interior.

\*See map in frontispiece.

## MEAN MONTHLY TEMPERATURE AND RAINFALL.



The graph shows Mean Temperature in shade (Deg. Fah.) and the average Monthly Rainfall (inches) at each station over a series of years.  
 Temperature shown by firm line; Rainfall by broken line.

The following table shows the meteorological conditions of the principal stations in the Coastal Division, arranged in the order of their latitude. These stations are representative of the whole division, and the figures are the average of a large number of years:—

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual, 1917-1936.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
	miles.	feet.	°	°	°	°	°	°	inches.
<i>North Coast—</i>									
Lismore ... ..	13	52	66·7	75·0	56·9	22·6	113·0	23·0	54·71
Grafton ... ..	22	21	68·3	76·8	58·1	24·7	114·0	24·9	34·64
<i>Hunter and Manning—</i>									
Jerry's Plain ... ..	53	367	64·4	75·5	52·2	28·8	118·0	19·0	24·90
West Maitland ... ..	18	40	64·5	74·6	53·5	21·6	114·0	28·0	33·95
Newcastle ... ..	1	34	64·4	72·1	55·5	14·6	110·5	31·0	40·97
Sydney ... ..	5	138	63·2	71·0	54·3	14·0	108·5	35·7	44·41
<i>South Coast—</i>									
Wollongong ... ..	0	54	63·0	70·0	54·9	16·7	110·0	33·6	49·51
Nowra ... ..	6	30	62·8	70·5	54·5	19·7	110·8	31·5	40·54
Moruya Heads ... ..	0	50	60·8	67·6	53·0	17·4	114·8	22·6	35·70
Bega ... ..	8	50	59·9	68·8	50·0	26·5	111·0	20·0	36·25

Taking the coast as a whole, the difference between the mean summer and mean winter temperature is about 18° only.

The North Coast districts are favoured with a warm, moist climate, the rainfall being from 34 to 80 inches annually. The mean temperature for the year is from 66° to 69°, the summer mean being 75° to 77°, and the winter mean 56° to 59°. On the South Coast the rainfall varies from 30 to 60 inches, and the mean temperature ranges between 60° and 63°, the summer mean being from 66° at the foot of the ranges to 70° on the sea coast, and the winter from 50° to 55° over the same area.

Coastal rains come from the sea with both south-east and north-east winds, being further augmented in the latter part of the year by thunderstorms from the north-west.

Sydney is situated on the coast about half-way between the extreme northern and southern limits of the State. Its mean annual temperature is 63° Fahr. The mean seasonal range is only 17°, calculated over a period of seventy-eight years, the mean summer temperature being 71° and the winter temperature 54°.

The following table shows the average meteorological conditions of Sydney, based on the experience of the seventy-eight years ended 1936:—

Month,			Average Hourly Reading of Standard Barometer, corrected to 32° Fah.; Standard Gravity and Mean Sea Level.	Temperature (in shade).			Rainfall.			
				Mean Standard.	Average Reading of Maximum Thermometer.	Average Reading of Minimum Thermometer.	Average.	Greatest.	Least.	Average number of days Rain.
				°	°	°	inches.	inches.	inches.	
January ...	...	...	29·894	71·6	78·4	64·9	3·58	15·26	0·25	14
February..	...	...	29·942	71·3	77·7	65·0	4·27	18·56	0·23	13
March ...	...	...	31·013	69·3	75·7	62·9	4·85	18·70	0·42	15
April ...	...	...	30·068	64·7	71·4	58·0	5·45	24·49	0·06	14
May ...	...	...	30·085	58·8	65·6	52·1	5·08	23·03	0·18	14
June ...	...	...	30·064	54·7	61·2	48·2	4·69	16·30	0·19	13
July ...	...	...	30·069	53·9	59·9	46·0	4·81	13·21	0·12	12
August ...	...	...	30·068	55·2	62·9	47·5	2·88	14·89	0·04	11
September	...	...	30·010	59·2	67·0	51·3	2·89	14·05	0·08	12
October ...	...	...	29·967	63·6	71·3	55·8	2·84	11·14	0·21	12
November	...	...	29·640	67·0	74·3	59·6	2·80	9·88	0·07	12
December	...	...	29·882	70·0	77·0	62·0	2·97	15·82	0·23	13
Annual ...	...	...	30·000	63·2	70·2	56·2	47·10	82·76	23·01	155

#### Tablelands.

On the Northern Tableland the rainfall is consistent, ranging from 29 inches in the western parts to 40 inches in the eastern. The temperature is cool and bracing, the annual average being between 56° and 60°; the mean summer temperature lies between 66° and 72°, and the mean winter between 44° and 47°. The Southern Tableland is the coldest part of the State, the mean annual temperature being about 54°. In summer the mean ranges from 55° to 68°, and in winter from 33° to 45°. At Kiandra, the elevation of which is 4,640 feet, the mean annual temperature is 44·2°. Near the southern extremity of the tableland, on the Snowy and Muniung Ranges, the snow is usually present throughout the year.

The statement below shows, for the Tableland districts, particulars of average temperature and rainfall at typical stations over a period of years:—

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual, 1917-1936.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
<i>Northern Tableland—</i>	miles.	feet.	°	°	°	°	°	°	inches.
Tenterfield ...	80	2,827	58·4	68·5	46·9	24·0	101·0	18·0	31·81
Inverell ...	124	1,980	59·7	71·5	47·2	29·7	105·5	14·0	29·36
Glen Innes ...	90	3,518	56·1	66·3	44·5	24·3	101·4	16·0	32·03
<i>Central Tableland—</i>									
Cassilis (Dalkcith) ...	120	1,500	60·0	71·8	47·7	24·2	109·5	17·5	21·76
Mudgee ...	121	1,635	60·0	72·6	47·1	28·1	113·2	15·0	24·78
Bathurst ...	96	2,200	57·0	69·4	44·5	27·2	112·9	13·0	23·12
Katoomba ...	58	3,349	53·9	63·3	43·5	15·6	98·0	26·5	53·72
<i>Southern Tableland—</i>									
Crookwell ...	81	2,000	52·8	64·0	41·5	23·4	100·0	15·0	35·29
Goulburn ...	54	2,129	56·3	67·8	44·5	23·3	111·0	13·0	24·40
Canberra ...	68	1,837	55·7	67·8	43·9	23·6	104·2	14·0	24·54
Kiandra ...	88	4,640	44·2	55·3	32·8	20·9	91·0	<sup>5</sup> below zero	62·30
Bombala ...	37	3,000	52·6	62·7	41·9	24·2	101·5	15·2	27·34

*Western Slopes.*

On the Western Slopes the rainfall is distributed uniformly, varying from an annual average of 20 inches in the western parts to 30 inches in the eastern; the most fertile part of the wheat-growing area of the State is situated on the southern part of these slopes, where the average rainfall is about 25 inches per annum. The mean annual temperature ranges from 67° in the north to 59° in the south; in the summer from 80° to 72°, and in the winter from 53° to 46°.

North of the Lachlan River, good rains are expected from the tropical disturbances during February and March, although they may come as late as May, and at times during the remainder of the year.

In the Riverina district, south of the Murrumbidgee generally, and on the South-western Slopes, fairly reliable rains, light but frequent, are experienced during the winter and spring months.

The next statement gives information as to average temperature and rainfall for the principal stations on the Western Slopes over a period of years:—

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual, 1917-1936.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
<i>North Western—</i>	miles.	feet.	°	°	°	°	°	°	inches
Moree ... ..	204	680	67·4	80·2	53·4	23·6	117·0	19·0	21·33
Narrabri ... ..	193	697	66·6	80·1	52·0	27·7	117·0	20·5	24·88
Quirindi ... ..	115	1,278	61·7	74·0	48·5	29·4	109·0	13·0	26·56
<i>Central Western—</i>									
Dubbo ... ..	177	863	63·7	77·7	49·7	27·5	115·4	16·9	21·32
<i>South Western—</i>									
Young... ..	140	1,416	59·3	72·4	46·6	25·5	110·5	20·0	25·60
Wagga Wagga ... ..	158	615	61·5	74·8	48·6	24·8	116·8	22·0	22·02
Urana... ..	213	400	62·1	75·0	48·8	25·8	114·0	25·0	17·95
Albury ... ..	175	531	60·9	74·2	48·0	26·6	117·3	19·9	28·98

*Western Plains.*

The Western District consists of a vast plain, its continuity being broken only by the Grey and Barrier Ranges. Owing to the absence of mountains in the interior, the annual rainfall over a great part of this division, which lies in the zone of high pressure, does not exceed 10 inches. It increases from 7 inches on the north-western boundary of the State to 10 and 15 inches along the Darling River, and 20 inches on the eastern limits of the plain country. The lower Murray and Murrumbidgee basins, which extend into the Western Plains, are closer to the Victorian than the New South Wales coast, and this factor facilitates precipitation over that region under the influence of southern depressions. The mean annual temperature ranges from 69° in the north to 62° in the south; in the summer from 83° to 74°, and in the winter from 50° to 54°.

The summer readings of the thermometer in this district are from 10° to 20° higher than those on the coast. Excessive heat is experienced occasionally during the summer season.

The winter, with an average temperature of 52°, accompanied by clear skies, and an absence of snow, leaves little to be desired from the standpoint of health; while, owing chiefly to the dryness of the climate, these inland regions produce merino wool of the highest quality.

The meteorological conditions of the Western Plains and the Riverina division will be seen from the following statement, corresponding to those given already for the other divisions of the State:—

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual, 1917-1936.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
	miles.	feet.	°	°	°	°	°	°	inches.
Brewarrina ... ..	345	430	67·8	81·5	53·6	27·7	120·0	22·0	14·66
Bourke ... ..	386	350	69·1	83·2	54·1	27·7	125·0	25·0	12·35
Wilcannia ... ..	473	246	66·5	80·0	52·5	26·5	120·8	21·8	9·71
Broken Hill ... ..	555	1,000	64·5	77·3	51·4	23·2	115·9	27·0	8·98
Condobolin ... ..	227	700	64·9	78·6	50·9	26·8	120·0	20·0	16·43
Wentworth ... ..	478	144	63·8	75·8	51·8	24·1	117·0	21·0	10·63
Hay ... ..	309	291	62·7	75·3	50·1	26·7	117·3	22·9	14·12
Deniliquin ... ..	287	268	61·8	74·1	49·6	24·2	116·5	22·0	16·27

#### *Meteorological Conditions During 1936.*

Although aggregate rainfall was above the average over most of the Central and Southern Slopes and Tablelands and part of the Western Division, dry conditions prevailed over most of the State. Drought conditions were experienced in the Coastal belt and most of the northern hinterland. Rainfall was below normal over nearly the whole of the coastal belt from April to November, inclusive, while generally throughout the State dry weather was experienced from mid-autumn to early winter and throughout the spring. However, good rains in July and timely August falls, with early summer showers, assisted cereal crops, and averted the threat of failure at critical periods of the season. General rains were received in December, definitely ending drought conditions, and at some places in the Western Division December was the wettest month on record.

Sydney experienced the driest year since 1888. The two years 1935 and 1936, with a total of 61·10 inches—35 per cent, below normal—constituted the driest two consecutive years on record. With unusually cool conditions prevailing on the coast in January and February, the summer of 1935-36 was the coolest experienced in Sydney since observations have been recorded. For the first time in 79 years of record, mean maximum and mean minimum temperatures in Sydney were lower in September than in August, while early in November a heat wave, with thermometer readings exceeding 95 degrees on three successive days, created a record for the capital for any month. Data from selected stations indicate that mean temperatures were but slightly below normal throughout the State during 1936.

#### OBSERVATORY.

Sydney Observatory, lat. 33° 51' 41·1" south, long. 151° 12' 17·8" east, established in the year 1856, is a State institution. The work of the Observatory is astronomical, and the principal instruments are the transit circle,

astrograph, equatorial, and seismograph. The principal scientific work is the determination of the position, distribution, and movement of stars in the region allotted to Sydney (*viz.*,  $52^{\circ}$  to  $65^{\circ}$  south declination) in the great international scheme. In addition, occasional observations, such as those of comets, are made with the equatorial, and systematic records of earth tremors are sent to the Earthquake Committee of the British Association for the Advancement of Science, and the principal seismological stations throughout the world. Practical work embraces the determination and notification of the standard time of the State; correspondence of an educational nature on astronomical matters, and day and evening reception of visitors interested in astronomy.

The activities of the Observatory were restricted to the more important branches of research work as from July, 1926.

#### STANDARD TIME.

The mean time of the 150th meridian of east longitude, or 10 hours east of Greenwich, has been adopted as the standard time in New South Wales, which is, therefore, 10 hours ahead of the standard time adopted in England. For general purposes, however, legal time in Great Britain is one hour in advance of Greenwich Mean Time during the summer months in that country.

In the district of Broken Hill, South Australian standard time is generally observed, *viz.*,  $142\frac{1}{2}^{\circ}$  of east longitude, or 9 hours 30 minutes east of Greenwich. In the States of Queensland, Victoria, and Tasmania, the standard time is the same as in New South Wales. In Western Australia the standard time is the  $120^{\circ}$  of east longitude, or 8 hours east of Greenwich.

#### TIDES.

A self-recording tide-gauge has been in operation at Fort Denison, in Port Jackson, since 1867. The tidal datum adopted is Low Water, Ordinary Spring Tide. Taking this as zero, the mean sea-level is 2.52 feet; ordinary low water, 0.78 feet; ordinary high water, 4.20 feet; and the mean daily range is 3 feet 5 inches. The lowest tide was recorded on 16th July, 1916, when the gauge fell 1 foot 3 inches below datum. The highest tide was recorded on 26th May, 1880, *viz.*, 7 feet  $6\frac{1}{2}$  inches; in 1876 the gauge recorded 7 feet  $4\frac{1}{2}$  inches on 22nd June, and 7 feet 3 inches on 21st July. On 3rd August, 1921, the gauge registered 7 feet 2 inches, and on that day occurred the greatest tidal range on record—6 feet  $9\frac{1}{2}$  inches.

At Port Hunter the average rise and fall of ordinary tides is 3 feet 3 inches, and of spring tides 5 feet  $4\frac{1}{2}$  inches; the greatest range being 6 feet 5 inches. The highest tide registered was 7 feet 4 inches in May, 1898.

On the coast the average rise of spring tides is 5 feet 6 inches approximately.

## CONSTITUTION AND GOVERNMENT.

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THERE are in New South Wales three administrations, viz., the Federal, whose seat is in the Federal Capital at Canberra (New South Wales), and which controls matters affecting the interests of Australia as a whole; the State, located in Sydney, which deals with the more important questions of State and local interest; and the Local Government bodies, whose headquarters are at convenient centres within their areas, in which they control matters of purely local concern—these areas extend over nearly two-thirds of the State.

The State Government is the oldest, dating in its present form from 1856. Its constitution was modified in 1901, when the Federal Government was established, in 1906, when Local Government was extended over its present area, and in 1934 with the change in the Legislative Council from a nominee to an indirectly elected chamber as indicated in succeeding pages.

### *Early Forms of Government.*

A brief account of the early forms of government in New South Wales and of the introduction of the system of responsible government was published in the Year Book for 1921, at page 25. An account of the Commonwealth Government may be found in the same edition at page 38.

### PRESENT SYSTEM OF STATE GOVERNMENT.

The Constitution of New South Wales is not framed completely in the Constitution Act of 1902-1933, and is not entirely written. It is drawn from several diverse sources, viz., certain Imperial statutes, such as the Colonial Laws Validity Act (1865) and the Commonwealth of Australia Constitution Act (1900); the Letters Patent and the Instructions to the Governor; an element of inherited English law; some Federal statutes, including amendments to the Commonwealth of Australia Constitution Act; certain State statutes; numerous legal decisions; and a large element of English and local convention.

The Imperial Parliament is legally omnipotent in local as well as in Imperial affairs, and it may exercise effective control over the affairs of the State by direct legislation. The Statute of Westminster, passed by the Imperial Parliament in 1931, made provision for the removal of certain restrictions on the legislative autonomy of the British Dominions, and as well, for laws of the Parliament of the United Kingdom to cease to have effect therein unless enacted on the request and by the consent of the Parliaments and Governments concerned. The provisions of the Statute have not, however, been adopted by the Commonwealth Parliament, but a bill for its adoption was before Parliament in June, 1937. Imperial legislation forms the basis of the existing Constitution, and the Imperial Parliament regulates all matters of Imperial concern in addition to controlling the extensive powers which remain vested in the Crown by virtue of its prerogative. These include such important matters as foreign relations in peace and war, and control of the forces. The Commonwealth, however, is a member State of the League of Nations, whose representative attends the League Assembly under the sole authority of the Commonwealth Government without any intervention by the Imperial Government or powers from the King in his Imperial capacity. It also has distinct status

in the Permanent Court of Arbitration and plenary powers to approve conventions, whilst treaties concluded by the Imperial Government affecting Australia are subject to ratification by the Parliament of the Commonwealth. Thus, the question of dominion sovereignty has become one of great complexity. It is apparent that, in the determination of its international relationships, the powers of the Commonwealth have expanded. Matters of Imperial concern are discussed at Imperial conferences, attended by representatives of the British Government and Governments of the Empire. Such conferences, though without constitutional powers, facilitate agreements which may subsequently be validated by the Parliaments of the political units affected, and provide medium for the expression of British and dominion opinion in matters of common interest. An Imperial Conference was held in London in May, 1937. In local affairs the prerogatives of the Crown are generally exercised by the Governor on the advice of the Executive Council, but when Imperial interests are involved the prerogative powers are exercised through the medium of the Privy Council, the Secretary of State for the Colonies, and the Governor.

### *The Governor.*

In New South Wales the position of the Governor is primarily that of local representative of the Crown, and through him the powers of the Crown in matters of local concern are exercised. In addition he is titular head of the Government of New South Wales; he possesses powers similar to those of a constitutional sovereign, and he performs the formal and ceremonial functions which attach to the Crown in its august capacity.

His constitutional functions are defined and regulated partly by various statutes, which from time to time cast new duties upon him, partly by the Letters Patent constituting his office, and partly by the Instructions to the Governor. The Letters Patent and Instructions were given under the Royal Sign Manual in 1900, and amended in 1909.

These functions cover a wide range of important duties, and it is directed that "in the execution of the powers and authorities vested in him the Governor shall be guided by the advice of the Executive Council." This provision, however, is modified by the further direction that if, in any case the Governor should see sufficient cause to dissent from the opinion of his Ministers, he may act in the exercise of his powers and authority in opposition to the opinion of his Ministers, reporting the matter to His Majesty through the Secretary of State for the Dominions without delay. The extent of the Governor's powers, however, tends to contract, though he possesses important spheres of discretionary action, *e.g.* in regard to dissolution of Parliament. Moreover, he is entitled to full information on all matters to which his assent is sought, and in this way he may exercise a general supervision over his officers, and use his personal influence for the good of the State. The general nature of his position is such that he is guardian of the Constitution and bound to see that the great powers with which he is entrusted are not used otherwise than in the public interest. In extreme cases his discretion constitutes a safeguard against malpractice.

His more important constitutional duties are to appoint the Executive Council and to preside over its deliberations; to summon, prorogue, and dissolve the Legislature; to assent to, refuse to assent to, or reserve bills passed by the Legislature; to keep and use the Public Seal of the State; to appoint all ministers and officers of State; and, in proper cases, to remove and suspend officers of State. He exercises the King's prerogative of mercy, but only on the advice of the Executive Council in capital cases, and of a Minister of the Crown in other cases.

With respect to responsibility for his actions the Governor does not occupy the same position as the King. He is amenable to the law; and, although the State accepts responsibility for his official acts, he is personally liable for his unofficial actions, civil and criminal. Politically he is indirectly responsible to the Imperial Parliament through the Secretary of State for the Colonies, but in State politics he usually acts on the advice of his Ministers, and they take the responsibility for their advice. However, in an extreme case if good reason existed the local Legislature might be justified in asking for his removal.

The Governor's normal term of office is five years. His salary is £5,000 per annum, which, with certain allowances, is provided by the Constitution Act out of the revenues of the State.

The periods for which the Governor may absent himself from the State are limited by the Instructions. When he is absent the Lieutenant-Governor acts in his stead in all matters of State. For that purpose the Chief Justice is usually appointed. In the event of the Lieutenant-Governor not being available to fill the Governor's position, an Administrator assumes office under a dormant Commission appointing the Senior Judge of the State as Administrator.

Brigadier-General the Hon. Sir Alexander Gore Arkwright Hore-Ruthven (now Lord Gowrie of Canberra and of Dirleton, P.C., V.C., G.C.M.G., C.B., D.S.O.), who took the oath of office of Governor on 21st February, 1935, assumed the office of Governor-General of Australia on 22nd January, 1936. Admiral the Hon. Sir David Murray Anderson, K.C.B., K.C.M.G., M.V.O., was sworn in on 6th August, 1936, but died on 30th October, 1936. He was succeeded by Captain the Right Honourable John de Vere Baron Wakehurst, K.C.M.G., who assumed the office of Governor on 8th April, 1937. Sir Philip Whistler Street, K.C.M.G., is Lieutenant-Governor.

#### *The Executive.*

All important acts of State are performed or sanctioned by the Governor-in-Council, and, except in the limited spheres where the Governor possesses discretionary powers, he is required, in matters of local concern, to act on the advice of the Executive Council or of a Minister of the Crown.

The Council is established by virtue of the Letters Patent constituting the office of Governor, and it is composed of such persons as the Governor is pleased to appoint. Its members are invariably members of the Ministry formed by the leader of the dominant party in the Legislative Assembly. When a member resigns from the Ministry he resigns also from the Executive Council, otherwise he may be dismissed by the Governor.

The Executive Council meets only when summoned by the Governor, who is required by his Instructions to preside over its deliberations unless absent for "some necessary or reasonable cause." In his absence the Vice-President presides.

#### *The Ministry or Cabinet.*

In New South Wales the terms "Ministry" and "Cabinet" are synonymous, since both bodies by custom consist of those members of Parliament chosen to administer departments of State, and to perform other executive functions. The Ministry is answerable to Parliament for its administration, and it continues in office only so long as it commands the confidence of the Legislative Assembly, from which nearly all its members are chosen. An adverse vote in the Legislative Council does not affect the life of the Ministry. The constitutional practices of the Imperial Parliament with respect to the appointment and resignation of ministers have been adopted

tacitly with some minor modifications. Cabinet acts in a similar way to the English Cabinet under direction of the Premier, who supervises the general legislative and administrative policy and makes all communications to the Governor.

Frequent meetings of Cabinet are held to deliberate upon the general policy of the administration, the more important business matters of the State, and the legislative measures to be introduced to Parliament, and to manage the financial business of the State. Its decisions are carried into effect by the Executive Council or by individual Ministers as each case requires.

Administrative matters of minor importance are determined by ministerial heads of departments without reference to the Executive Council, and every Minister possesses considerable discretionary powers in the ordinary affairs of his department.

The Ministry which continued in office after general elections in May, 1935, consisted in July, 1937, of the following members:—

Premier and Colonial Treasurer.—The Hon. B. S. B. Stevens, M.L.A.

Deputy Premier and Minister for Transport.—Lieut.-Col., The Hon.

M. F. Bruxner, D.S.O., M.L.A.

Minister for Health.—The Hon. H. P. FitzSimons, M.L.A.

Attorney-General and Vice-President of the Executive Council—

The Hon. H. E. Manning, K.C., B.A., LL.B., M.L.C.

Secretary for Lands.—The Hon. E. A. Buttenshaw, M.L.A.

Colonial Secretary.—Capt. The Hon. F. A. Chaffey, M.L.A.

Minister for Education.—The Hon. D. H. Drummond, M.L.A.

Minister for Labour and Industry.—The Hon. J. M. Dunningham, M.L.A.

Minister for Agriculture.—The Hon. H. Main, M.L.A.

Assistant Minister in the Legislative Council.—The Hon. J. Ryan, M.L.C.

Minister for Local Government and Secretary for Public Works—

The Hon. E. S. Spooner, M.L.A.

Secretary for Mines and Minister for Forests.—The Hon. R. S. Vincent, M.L.A.

Minister of Justice.—The Hon. L. O. Martin, B.A., LL.B., M.L.A.

Minister for Social Services.—The Hon. H. M. Hawkins, M.L.C.

Assistant Ministers without Portfolio.—Major the Hon. J. B. Shand, V.D., M.L.A., The Hon. G. C. Gollan, M.L.A., and The Hon. C.

A. Sinclair, B.A., LL.B., M.L.A.

The salaries of Ministers as fixed by statute in 1925 were reduced by 15 per cent. as from 1st April, 1930, and further reductions were made in August, 1931, and December, 1932, as shown below:—

	As from 1st July, 1925.	As from 1st April, 1930.	As from 7th August, 1931.	As from 1st Dec. 1932.,
	£	£	£	£
The Premier ... ..	2,445	2,078	1,800	1,710
The Attorney-General ... ..	2,095	1,781	1,564	1,486
The Vice-President of the Executive Council (and leader of the Govern- ment in the Legislative Council) ...	1,375	1,169	1,072	1,018
Other Ministers of the Crown ...	17,505	14,879	13,167	12,510
Total .. ..	23,420	19,907	17,603	16,724

These amounts include the annual allowances paid to Ministers as members of the Legislative Assembly, and the figures shown in the final column are the amounts now payable.

*Agent-General in London.*

Early in 1934 the Government considered that in view of the unusual circumstances affecting inter-Empire relationships, commercially and otherwise, it was desirable that the State should have independent representation in London. Accordingly an official representative was appointed for a term of three years from 15th February, 1934. The official representative, now designated the Agent-General, who works in close co-operation with the High Commissioner for Australia, keeps the Government informed of political and economic developments overseas, seeks to promote trade between this State and the United Kingdom and other countries, and generally acts as the agent of the State in London.

Mr. A. E. Heath, C.M.G., is the present Agent-General, and his office is located at Wellington House, The Strand, London.

## THE STATE LEGISLATURE.

The State Legislature consists of the Crown and two Houses of Parliament, and all State laws (except in the event of disagreement between the Houses—see page 24) are enacted “by the King’s Most Excellent Majesty, by and with the advice and consent of the Legislative Council and the Legislative Assembly in Parliament assembled.” It exercises a general power of legislation, and possesses plenary and not delegated authority. The Constitution Act of 1902 provides that “the Legislature shall, subject to the provisions of the Commonwealth of Australia Constitution Act, have power to make laws for the peace, welfare, and good government of New South Wales in all cases whatsoever.” It can delegate its powers, and within its territory its actions are restricted only by legislation of the Imperial Parliament intended to apply to New South Wales, and by valid federal enactments.

The two Houses of Parliament are the Legislative Council (or Upper House), and the Legislative Assembly (or Lower House). Their powers are nominally co-ordinate, but it is provided that bills appropriating money or imposing taxation and bills affecting itself must originate in the Legislative Assembly, which is the chamber elected by general franchise, and which it is recognised, must control taxation and expenditure. Moreover, the responsibility of the Ministry for financial measures is secured by a provision of the Constitution Act that the Legislative Assembly may not appropriate any part of the Consolidated Revenue Fund or of any other tax or impost for any purpose unless it has first been recommended by a message of the Governor to the Assembly during the current session.

Every member of Parliament must take an oath or make an affirmation of allegiance.

By virtue of the Constitution Act it is a function of the Governor to summon, prorogue, and dissolve Parliament, but it is provided that both Houses shall meet at least once in every year, so that a period of twelve months shall not elapse between sessions. The continuity of Parliament is ensured by law. The Parliamentary Electorates and Elections Act, passed in 1912 and amended in subsequent years, provides that writs for the election of new members must be issued within four days after the dissolution of the Legislative Assembly, that they must be returned within sixty days after issue (unless otherwise directed by the Governor), and that Parliament shall meet within seven days of the return of writs. The duration of Parliament was limited to three years in 1874.

It is agreed tacitly that the procedure of each House shall be conducted according to its prototype in the Imperial Parliament, but comprehensive standing orders for regulation of the business of each House have been

drawn up. Provision has been made under the Constitution Act, 1902, as amended by the Constitution Amendment (Legislative Council) Act, No. 2 of 1933, to meet cases of disagreement arising between the two Houses, eliminating the possibility of a deadlock. The procedure to be followed is described on page 24.

With the consent of the Legislative Council, any member of the Legislative Assembly who is an Executive Councillor may sit in the Upper House for the purpose of explaining the provisions of bills relating to or connected with the Department administered by him. He may take part in debate and discussion, but may not vote in the Legislative Council.

Much interest and some controversy has centred around the powers of the Governor in granting a dissolution of Parliament. Strictly speaking, only the Legislative Assembly is dissolved, but Parliament is ended thereby, because both Houses are necessary to constitute a Parliament. The main cases in which a dissolution may be granted arise when, on a question of policy, the Ministry sustains an adverse vote in the Legislative Assembly, and when the Legislative Assembly becomes factious, or will not form a stable administration.

#### *The Legislative Council.*

Prior to 1934 the Legislative Council was a nominee chamber, consisting of a variable number of members appointed for life without remuneration; but as from 23rd April, 1934, the Council was reconstituted under the Constitution Act, 1902, as amended by the Constitution Amendment (Legislative Council) Act, 1933, and became a House of 60 members elected by members of both Houses to serve, without remuneration, for a fixed term of years. The constitution and powers of the former Legislative Council were described briefly in the Year Book, 1931-32 (pages 21 and 22).

#### *Reconstitution of the Legislative Council (1929-1934).*

Under the provisions of the Constitution (Legislative Council) Amendment Act, 1929, a bill for abolition of the Upper House or for the alteration of its constitution or powers may not be presented for Royal Assent until it has been approved by the electors at a referendum at least two months after the bill has been passed by Parliament. An historical account of the events associated with the change in character of the Legislative Council may be found in Official Year Book, 1929-30, at page 26, and 1932-33, at page 22.

Following the general elections in June, 1932, the new Government passed legislation to give the Council its present form, and the bill for this purpose was submitted to, and approved by, the electors at a referendum taken on 13th May, 1933. A measure to give effect to the decision of the electors was unsuccessfully contested in the Courts, and received Royal Assent on 25th September, 1933.

#### *The Legislative Council as Reconstituted.*

The Legislative Council, as reconstituted on 23rd April, 1934, consists of sixty elected members, whose services are rendered without remuneration. The members of the Legislative Assembly and the Legislative Council comprise the "electorate." They record their votes at simultaneous sittings of the respective Houses of Parliament. Voting is by secret ballot. Casual vacancies are filled by a like election. Contested elections in which more than one seat is to be filled are to be decided according to the principle of proportional representation, each voter having one transferable vote; but where only one member is to be elected, a preferential system applies.

Any person, male or female, who is enfranchised under the electoral provisions relating to the election of members of the Legislative Assembly, and has been resident in the Commonwealth of Australia for at least three years, is eligible for election as a member of the Legislative Council, except that members of the Legislative Assembly are debarred from election to the Upper House. Membership of the Council is rendered void by the acceptance of any office of profit under the Crown, or of any pension from the Crown; but persons in receipt of pay, half pay, or pension by virtue of service in the Defence Forces, or office of profit in those services, together with holders of certain offices (including the office of Vice-President of the Executive Council) created by Act of Parliament as an office of the Executive Government, remain eligible for membership. The seats of members are rendered vacant by death, resignation, absence, acceptance of foreign allegiance, bankruptcy, acceptance of public contracts, or by criminal conviction. Candidature requires nomination with consent under the hand of two "electors", whilst each "elector" may sign only one nomination paper.

In the election of the first House of sixty members, four separate ballots were taken, and in each fifteen members were elected. The term of service is twelve years in the case of the fifteen first elected, and nine, six and three years respectively for each successive group. Thereafter one-fourth of the members are to be elected every three years at an election to take place during the period of six months immediately preceding the retirement of the fifteen members whose term of service is about to expire, and these members will serve for a term of twelve years. Members elected to fill casual vacancies will serve only for the unexpired period of the term of the vacant seat. An election to fill the fifteen seats falling vacant on 22nd April, 1937, was held on 8th December, 1936.

The presence of one-fourth of the members, exclusive of the President, is necessary to form a quorum. The Legislative Council is required to choose a President from amongst their number. He ceases to hold office if he ceases to be a member of the Legislative Council, and may be removed from office by a vote of the Chamber, or he may resign his office. He receives a salary of £898 per annum. There is also a Chairman of Committees to whom a salary of £544 per annum is paid. Members of the Legislative Council are supplied with free passes on the State railways and tramways, covering the period of membership, and persons who were members of the Council prior to its re-constitution retain their passes for a period equivalent to the period of office as a Legislative Councillor.

In the case of disagreement between the Legislative Assembly and the Legislative Council in respect of money bills, the new constitutional provisions preserve the traditional right of the Legislative Assembly to control the purse. Bills relating to appropriations for annual services may be presented for Royal Assent with or without any amendment suggested by the Council, and may become Acts notwithstanding the failure of the Upper House to agree to them; but any provisions in any such Act dealing with any matter other than the appropriation cannot become law.

To overcome disagreements in regard to Bills (other than such Appropriation Bills) passed by the Legislative Assembly it is provided that the Legislative Assembly may pass the Bill again after an interval of three months. If the Legislative Council rejects it again (or makes amendments unacceptable to the Legislative Assembly) and if a conference of managers appointed by the two Houses and a joint sitting of the two Houses fails to attain agreement, the Legislative Assembly may direct that the bill be submitted to a referendum of the electors. If approved by a majority of electors, the Bill becomes law.

*The Legislative Assembly.*

The Legislative Assembly is the elective or popular House of Parliament, and is the most important factor in the government of the country. All bills appropriating any part of the public revenue, or for imposing any new rate, tax or impost, must originate in the Assembly, and by its power over Supply it ultimately controls the Executive. It consists of ninety members elected on a system of universal adult suffrage for a maximum period of three years. Any person who is enrolled as an elector of the State is eligible to be elected to the Legislative Assembly, except persons who are members of the Federal Legislature or of the Legislative Council, or who hold non-political offices of profit under the Crown, other than in the army or navy; but any officer of the public service of New South Wales may be elected to the Legislative Assembly on condition that he forthwith resigns his position in the service. All legal impediments to the election of women to the Legislative Assembly were removed in 1918. Several women have since contested seats at the elections, and one sat in the 28th Parliament, but there are no women members in the present Legislative Assembly. The seat of a member becomes vacant in similar cases to those stated above for Legislative Councillors.

A Speaker presides over the House, and his election is the first business when the House meets after election. He presides over debate, maintains order, represents the House officially, communicates its wishes and resolutions, defends its privileges when necessary, and determines its procedure. There is also a Chairman of Committees elected by the House at the beginning of each Parliament; he presides over the deliberations of the House in Committee of the Whole, and acts as Deputy-Speaker.

Payment of members of the Legislative Assembly was introduced as from 21st September, 1889. The amount was fixed originally at £300 per annum. Subsequent changes are shown below:—

	£		£
September, 1889 .. ..	300	July, 1925.. ..	875
September, 1912 .. ..	500	April, 1930 .. ..	744
November, 1920 .. ..	870	August, 1931 .. ..	706
July, 1922 .. ..	600	December, 1932 .. ..	670

An aggregate amount of £2,700 is provided for postage, each member receiving an order monthly for one-twelfth of his annual allowance. In addition, each member is supplied with a free pass on State railways and tramways. The salary of the Speaker is £1,217, and of the Chairman of Committees £839 per annum. The leader of the Opposition formerly received an annual allowance of £250 in addition to his allowance as member, but the two allowances combined were £881 per annum as from 7th August, 1931, and £846 as from 1st December, 1932. The amounts shown are the actual amounts received under the Parliamentary Allowances and Salaries Act, 1932.

*State Parliamentary Committees.*

A number of committees consisting of members of Parliament are appointed to deal with special matters connected with the business of the country and of either House; from time to time select committees are chosen to inquire into and report on specific matters for the information of Parliament and the public. Each House elects a committee to deal with its Standing Orders and with printing, and a joint committee to supervise the library. In addition there are the more important committees described below.

*Committees of Supply and of Ways and Means.*

These committees consist by custom of the whole of the members of the Legislative Assembly, and they deal with all money matters. The Committee of Supply debates and determines the nature and amount of the expenditure, and the Committee of Ways and Means debates and authorises the issue of the sums from the Consolidated Revenue Fund and frames the resolutions on which taxing proposals are based.

*Parliamentary Standing Committee on Public Works.*

A joint committee of members of the Legislative Council and Legislative Assembly, called the Parliamentary Standing Committee on Public Works, was usually appointed by ballot soon after the commencement of the first session of every Parliament. The committee consisted of three members of the Legislative Council and four members of the Legislative Assembly, and it had power, under the Public Works Act, to conduct inquiries, to summon witnesses, and to compel the production of books, etc. No appointments to this committee have been made since the commencement of the Parliament elected in 1930.

Proposals for public works of an estimated cost exceeding £20,000, with the exception of certain types of works for which statutory provision has otherwise been made, must be submitted and explained by a Minister in the Legislative Assembly, and then referred to the Public Works Committee for report.

The chairman received as remuneration £3 3s. for each sitting of the committee, and the other members £2 2s. each.

*Public Accounts Committee.*

For the better supervision of the financial business of the State a Public Accounts Committee is appointed by every Parliament under provisions of the Audit Act, 1902, from among the members of the Legislative Assembly. It consists of five members, and is clothed with powers of inquiry into any question arising in connection with the public accounts and upon any expenditure by a Minister of the Crown made without Parliamentary sanction. It reports on such matters to the Legislative Assembly.

*Court of Disputed Returns.*

The Parliamentary Electorates and Elections Act provides for the establishment of a Court of Disputed Returns—a jurisdiction conferred on the Supreme Court. The business of the Court is to inquire into and determine matters connected with election petitions and questions referred to it by the Legislative Assembly concerning the validity of any election or the return of any member, and questions involving the qualifications of members. The law in this respect has been made applicable in the case of disputed elections of the Legislative Council.

Decisions of the Court are final, but must be reported to the House.

*Commissions and Trusts.*

In addition to the Ministerial Departments, various public services are administered by Commissions, Boards, and Trusts; the more important are:—

Commissioner for Railways.

Commissioner for Road Transport and Tramways.

Commissioner for Main Roads.

Metropolitan Water, Sewerage and Drainage Board.

Hunter District Water Supply and Sewerage Board.

Maritime Services Board.

Water Conservation and Irrigation Commission.

Board of Fire Commissioners of New South Wales.

Metropolitan Meat Industry Commissioner.  
 Forestry Commission.  
 Western Lands Commissioner.  
 Prickly-pear Destruction Commission.  
 Hospitals Commission.  
 Workers' Compensation Commission.  
 Industrial Commission.  
 Electoral Commission.  
 Milk Board.  
 Aborigines Protection Board.  
 State Superannuation Board.  
 Public Service Board.  
 Homes for Unemployed Trust.  
 Tourist Bureau.  
 Housing Improvement Board.

In each case the authority controls a specific service, and administers the statute law in relation to it, subject to a limited degree of supervision by a Minister. There is also a number of marketing boards constituted in respect of primary products under the Marketing Act.

#### *Auditor-General.*

The Auditor-General is appointed by the Governor, and holds office during good behaviour. In certain cases he may be suspended by the Governor, but he is removable from office only on an address from both Houses of Parliament. He is required to take an oath that he will faithfully perform his duties, and he is debarred from entering political life. He is endowed with wide powers of supervision, inspection and audit in regard to the collection and expenditure of public moneys and the manner in which the public accounts are kept. He exercises control over the issue of public moneys, and all warrants must be countersigned by him. Matters connected with the public accounts are subject to special or annual report to Parliament by him, and he may refer any matter to the Public Accounts Committee.

#### STATE ELECTORAL SYSTEM.

The electoral system is controlled by an Electoral Commissioner—who is charged with the administration of the Act and legal provisions relating to the registration or enrolment of electors, the preparation of rolls and the conduct of elections of the Legislative Assembly and of referenda under the Constitution Amendment (Legislative Council) Act, 1933. The Electoral Commissioner holds office for seven years and is eligible for reappointment. He may be removed from office only by resolution of both Houses of Parliament or through performing some disqualifying action laid down in the law.

#### *Franchise.*

The elections of members of the Legislative Assembly are conducted by secret ballot. Adult British subjects, men and women, are qualified for enrolment as electors when they have resided in the Commonwealth for a period of six months, in the State for three months, and in any subdivision of an electoral district for one month preceding the date of claim for enrolment.

Persons are disqualified from voting who are of unsound mind or who have been convicted and are under sentence for an offence punishable in any part of the British Empire by imprisonment for one year or longer.

Each elector is entitled to one vote only. The electoral rolls are compiled under provisions for compulsory enrolment introduced in 1921. Compulsory

voting first came into force at the elections of 1930. In accordance with an Act passed in 1928, arrangements have been made with the Commonwealth for joint electoral rolls for State and Federal purposes.

Electors absent from their districts are permitted to record their votes at any polling-place in the State, such votes being designated "Absent Votes." Postal voting is provided for in the case of persons precluded from attendance at any polling-place by reason of illness or infirmity, being distant over 10 miles, or travelling.

Where any qualified elector is blind or otherwise incapacitated from voting or is unable to write, he may require the deputy returning-officer to mark his ballot-paper according to his instructions.

Since the elections of 1930 an elector, who is not enrolled or whose name has been marked as having voted, may in certain circumstances vote after making a declaration that he has not already voted. Votes recorded under this provision are known as "section votes."

The appended table shows the extent to which these facilities for exercise of the franchise have been utilised in recent years:—

	Election 1925.	Election 1927.	Election 1930.	Election 1932.	Election 1935.
Absent Votes ... ..	36,054	64,871	97,958	87,578	92,583
Postal Votes ... ..	...	9,289	15,947	19,649	19,080
Section Votes ... ..	...	...	6,757	3,513	2,975

At general elections polling is conducted on the same day in all electorates. Polling-day is a public holiday from noon, and during the hours of polling (8 a.m. to 8 p.m.) the hotels are closed.

A system of voting intended to secure proportional representation was introduced by an Act passed in 1918 and operated at the general elections of 1920, 1922, and 1925. A description of the system and an analysis of the party representation secured under it is shown on page 42 of the Year Book for 1926-27. In 1926 an Act was passed restoring the system of single seats and providing for preferential voting. This Act also provided that casual vacancies occurring after the dissolution of the twenty-seventh Parliament should be filled at by-elections.

Voters must number the candidates in order of preference on the ballot-paper, and votes are informal unless preferences have been duly expressed for all candidates. In counting votes, the candidate is elected who has secured an absolute majority of votes either of first preferences outright or of first preferences plus votes transferred to him in due order of preference by excluding in turn candidates with the lowest number of votes and re-allotting their votes according to the next preference indicated.

#### *Electorates and Electors.*

The electoral law provides that electorates are to be redistributed whenever directed by the Governor. In the event of there being no direction by the Governor, a distribution must take place on the expiration of nine years from the date of the last redistribution. The redistribution is made by a special commission of three persons, viz., the Electoral Commissioner, the Government Statistician, and the Surveyor-General. The last redistribution was made in 1929.

For the purposes of the distribution it is prescribed by the Parliamentary Electorates and Elections (Amendment) Act of 1928 that the State must be divided into three parts, viz., the Sydney area, to which 43 seats are allotted, the Newcastle area 5 seats, and the Country area 42 seats.

The following table shows certain particulars as to parliamentary representation for each year in which elections have been held since 1913. Similar information covering the period 1856 to 1916 was published in the 1931-32 edition of this Year Book at page 26:—

Year of Election.	Number of Members of Legislative Assembly	Population per Member.	Proportion of persons enrolled to Total Population.	Total Number of Electors qualified to Vote.	Average number of Electors per Member.
			per cent.		
1913	90	20,500	55.1	1,037,999	11,533
1917	90	21,000	58.5	1,109,830	12,331
1920	90	22,800	56.1	1,154,437	12,827
1922	90	23,950	58.0	1,251,023	13,900
1925	90	25,500	58.3	1,339,080	14,879
1927	90	26,700	58.6	1,409,493	15,661
1930	90	28,100	57.4	1,440,785	16,008
1932	90	28,700	56.8	1,465,008	16,278
1935	90	29,350	57.9	1,528,713	16,986

Women voted for the first time in 1904, and since that year practically the whole of the adult population has been qualified to vote.

Elected under a similar franchise, the popular House comprises 65 members in Victoria, 62 members in Queensland and 46 members in South Australia, and the average number of electors per representative was respectively 16,912, 9,279, and 7,360 in those States at the latest elections for which figures are available.

#### *Votes cast at Elections.*

The following table shows the voting at the elections held in New South Wales since the general election in 1927. In the 1930-31 issue of the Year Book similar particulars are shown regarding each election since 1894, when a system based on single electorates and the principle of "one man one vote" was introduced. The number of electors as stated represents the number qualified to vote:—

Year of Election.		Electors Enrolled (whole State).	Contested Electorates.				
			Electors Enrolled.	Votes Recorded.		Informal Votes.	
				Number.	Percentage.	Number.	Percentage.
1927	{ Men ..	714,886	706,316	*591,820	*83.79	15,986	1.08
	{ Women ..	694,607	687,938	*558,957	*81.25		
	{ Total ...	1,409,493	1,394,254	1,150,777	82.54		
1930	{ Men ...	724,471	717,999	682,747	95.09	15,947	1.17
	{ Women ...	716,314	710,649	673,676	94.79		
	{ Total ...	1,440,785	1,428,648	1,356,423	94.94		
1932	{ Men ...	739,009	715,661	690,091	96.42	30,260	2.21
	{ Women ...	725,999	702,480	676,993	96.37		
	{ Total ...	1,465,008	1,418,141	1,367,087	96.39		
1935	{ Men ...	769,220	680,993†	654,383	96.09	39,333	2.92
	{ Women ...	759,493	669,866†	640,369	95.60		
	{ Total ...	1,528,713	1,350,859†	1,294,752	95.85		

\* Estimated, only partly recorded.

† With addition of voters under section 6.

Prior to the introduction of compulsory voting at the election of 1930, the proportion of electors who failed to record their votes was large, even if due allowance were made for obstacles to voting. The highest proportion of votes to enrolment under the voluntary system was 82.54 per cent., recorded in 1927, and the lowest 56.2 per cent., in 1920. Under the compulsory system about 96 per cent. of electors record their votes.

The number of women exercising their right to vote under the voluntary system was considerably less than the number of men, but the proportions have been approximately equal under the compulsory system.

*State Parliaments.*

A list of the Parliaments from 1889, when payment of members was instituted, up to December, 1913, appeared in the 1931-32 issue of this Year Book. A list of Parliaments since 1913 is appended:—

Number of Parliament.	Return of Writs.	Date of Opening.	Date of Dissolution.	Duration.	Number of Sessions.
23	23 and 29 Dec., 1915* ...	23 Dec. 1913...	21 Feb. 1917...	yrs. mths. dys. 3 1 29	5
24	10, 16, and 23 April, 1917* ...	17 April 1917...	18 Feb. 1920...	2 10 8	4
25	21 April, 1920...	27 April 1920...	17 Feb. 1922...	1 10 25	3
26	19 April, 1922...	26 April 1922...	18 April 1925†	3 0 0	5
27	20 June, 1925...	24 June, 1925...	7 Sept., 1927...	2 2 17	5
28	29 Oct., 1927...	3 Nov., 1927...	18 Sept., 1930...	2 10 22	4
29	21 Nov., 1930...	25 Nov., 1930...	13 May, 1932...	1 5 23	1
30	30 June, 1932...	23 June, 1932...	12 April, 1935...	2 9 20	4
31	10 June, 1935...	12 June, 1935...	‡	‡	‡

\* Under system of second ballots. † Expired by effluxion of time. ‡ Continuing July, 1937.

The normal duration of Parliament is three years. Unless previously dissolved Parliament expires by effluxion of time three years after the day prior to the original date of the return of the writs.

On account of war conditions and the disturbed state of public affairs, it was deemed advisable to extend the 23rd Parliament to a period exceeding the three years fixed by the Constitution Act, and the Legislative Assembly Continuance Act, 1916, was passed to provide for an extension from three years to four years. The Parliament, however, terminated after three years and sixty days.

*State Ministries.*

The various Ministries which have held office since 1913, together with the duration in office of each, are shown below. The life of a Ministry is not co-terminous with the life of a Parliament. In seventy-five years under the present system there have been forty-eight Ministries, but only thirty-one Parliaments. Up to 29th June, 1913, thirty-four Ministries had held office. Information respecting seven Ministries from 3rd August, 1894, to 29th June, 1913, is given in the 1931-32 edition of this Year Book at page 29.

Ministry.		In Office.		Duration.
Number.	Name of Premier and Party.	From—	To—	
35	Holman (Labour) ...	30 June 1913	15 Nov. 1916	yrs. mths. days. 3 4 16
36	Holman (National) ...	16 Nov. 1916	12 April 1920	3 4 28
37	Storey (Labour) ...	13 April 1920	10 Oct. 1921	1 5 27
38	Dooley (Labour) ...	10 Oct. 1921	20 Dec. 1921	0 2 11
39	Fuller (National) ...	20 Dec. 1921	20 Dec. 1921	About 7 hours.
40	Dooley (Labour) ...	20 Dec. 1921	13 April 1922	0 3 24
41	Fuller (National)* ...	13 April 1922	17 June 1925	3 2 4
42	Lang (Labour) ...	17 June 1925	26 May 1927	1 11 9
43	Lang (Labour)† ...	27 May 1927	18 Oct. 1927	0 4 22
44	Bavin (National)* ...	19 Oct. 1927	3 Nov. 1930	3 0 15
45	Lang (Labour) ...	4 Nov. 1930	13 May 1932	1 6 10
46	Stevens (National)* ...	13 May 1932	18 June 1932	0 1 5
47	Stevens (United Australia)* ...	18 June, 1932	11 Feb. 1935	2 7 25
48	Stevens (United Aust.)* †	11 Feb. 1935	‡	‡

\* And Country Party.

† Reconstruction.

‡ In Office, August, 1936.

## COST OF STATE PARLIAMENTARY GOVERNMENT.

The following statement shows the cost of State Parliamentary Government in New South Wales during recent years. Expenses of federal and local government are not included:—

Head of Expenditure.	1915-16.	1925-26.	1933-34.	1934-35.	1935-36
	£	£	£	£	£
<b>Governor—</b>					
Salary ... ..	5,000	5,000	5,000	5,000	(£) 4,259
Salaries, etc., of Staff... ..	3,549	4,028	3,518	2,541	3,231
Other expenses ... ..	1,547	1,945	1,095	4,497	3,043
	10,096	10,973	9,613	12,038	10,533
<b>Executive Council—</b>					
Salaries of Officers ... ..	...	570	716	583	337
Other expenses ... ..	...	333	3	48	38
	...	903	719	631	375
<b>Ministry—</b>					
Salaries of Ministers ... ..	11,040	23,420	19,907	16,524	16,924
Other ... ..	5,244	1,078	15	873	6,305
	16,284	24,498	19,922	17,397	23,289
<b>Parliament—</b>					
Legislative Council—					
Salaries of President and Chairman of Committees ... ..	1,220	1,900	1,615	1,592	1,511
Railway passes for Members ... ..	6,070	15,906	16,855	11,282	11,301
Postage for Members ... ..	...	...	60	40	40
Legislative Assembly—					
Salaries of Speaker and Chairman of Committees ... ..	1,740	2,790	2,198	1,918	2,056
Allowances to Members* ... ..	40,335	67,417	57,853	52,344	52,392
Railway passes for Members ... ..	10,387	17,462	18,709	18,110	18,012
Postage for Members ... ..	1,770	2,700	2,704	2,703	2,699
Both Houses—Joint expenditure—					
Standing Committee on Public Works—					
Remuneration of Members ... ..	3,599	3,966	1,050	...	...
Salaries of Staff and contingencies ... ..	2,626	2,145	1,732	1,306	592
Salaries of Reporting Staff included ... ..	8,269	7,564	7,633	7,633	7,470
Library—Salaries of Staff in ... ..	2,541	2,982	2,503	2,503	2,622
Contingencies... " other " ... ..	942	1,051	910	910	911
Other Salaries of Staff below. ... ..	23,516	26,029	21,543	21,543	22,107
Printing—Hansard ... ..	6,689	6,189	5,677	6,308	4,741
Other ... ..	14,967	13,562	10,981	10,895	9,487
Other Expenses ... ..	24,490	5,478	2,456	7,645	7,373
	113,893	174,783	159,516	146,732	143,314
<b>Electoral—</b>					
Salaries ... ..	1,123	2,104	3,956	2,564	2,100
Contingencies ... ..	56,491†	8,195	54,448	36,861	3,182
	57,614	10,299	58,404	39,425	5,282
<b>Royal Commissions and Select Committees</b>	4,114	7,790	720	8,893	7,110
<b>Grand Total ... ..</b>	£ 202,001	220,246	248,894	225,116	189,903
<b>Per head of population ... ..</b>	2s. 2d.	1s. 11·7d.	1s. 11·4d.	1s. 8·1d.	1s. 5·1d.

\* Excluding salaries of Ministers, Speaker, and Chairman of Committees. † Includes Liquor Referendum £80,244. ‡ Including £777 voluntarily repaid to Consolidated Revenue Fund. § Governor, £2,796; Lieut.-Governor, £1,463.

In considering such a table as shown above it is necessary to remember that there is no clear line of demarcation between costs incurred in respect of parliamentary government and the costs of ordinary administration. This is to be observed particularly in regard to ministers of the Crown who fill dual roles as administrative heads and parliamentary representatives. Similar difficulties arise in regard to Royal Commissions, which are, in many cases, partly administrative inquiries. In the absence of any means of dissecting the expenditure under these headings the whole of it has been treated as incidental to the system of parliamentary government. On the other hand such factors as the costs of ministerial motor cars and the salaries of ministers' private secretaries are omitted from account as appertaining mainly to administration.

The cost of parliamentary government in 1934-35 included the cost of general elections for the Legislative Assembly, and it represented less than 1 per cent. of the total governmental expenditure during the year, and was even proportionately smaller in 1935-36 at only 1s. 5.1d. per head of population.

The foregoing statement does not, however, represent the total cost of parliamentary government because it excludes the expense of Federal government. During the year 1935-36 this amounted to £443,844 for the whole Commonwealth, equivalent to 1s. 4d. per head of population. In 1934-35 the cost (including the cost of elections) was £532,162, or 1s. 7d. per head of population.

#### *New States Movements.*

By section 124 of the Commonwealth of Australia Constitution Act it is provided that "A new State (of the Commonwealth) may be formed by separation of territory from a State, but only with the consent of the Parliament thereof." A Royal Commission enquired into proposals for the creation of new States in New England and the Riverina during 1923-24, but in view of the unfavourable report of that Commission these proposals lapsed. During 1931-32 there arose a wide-spread and strongly supported agitation, particularly in the New England, Riverina, and Central-Western districts for the creation of new States by the separation of certain portions of New South Wales, regarded by protagonists as suitable for self-government.

In satisfaction of this renewed agitation a Commissioner was appointed on 25th August, 1933, to enquire and report as to the areas of New South Wales suitable for self-government as States of the Commonwealth of Australia, and as to the areas of the State in which referenda should be taken on any questions connected with the constitution of such areas as separate States. Widespread public enquiries were held, and the Commissioner's report was submitted on 2nd January, 1935. The Commissioner found that two areas appeared to satisfy these conditions—one, embracing roughly the New England, North Coast and the Hunter and Manning Districts; and the second, the remainder of the State, exclusive of the South Coast, Cumberland and Blue Mountains Districts. It was suggested that a separate referendum be taken in each of these areas, that in the Northern area to be taken and the result made known before electors in the Central-Western-Southern area should vote upon the question.

Certain constitutional difficulties, believed to stand in the way of legislative action in the present state of constitutional powers, have been pointed

out by the Commissioner and other authorities. These are matters largely outside the sphere of State action, and will be considered as questions for determination between the Commonwealth and the States.

### THE COMMONWEALTH.

The federation of the six Australian States was inaugurated formally on 1st January, 1901, for their mutual benefit in matters upon which it was agreed that joint action was desirable. A detailed account of the inauguration of Federation and the nature and functions of the Federal Parliament in their relation to the State was published in the Year Book for 1921 at pages 38-40 and 625. The broad principles of federation were:—The transfer of limited and defined powers of legislation to a Federal Parliament consisting of a Senate and a House of Representatives, the former being a revisory Chamber wherein the States are equally represented, and the latter, the principal Chamber, consisting of members elected from the States in proportion to their population; complete freedom of action for the State Parliaments in their own sphere; a High Court to determine the validity of legislation; and an effective method of amending the Constitution. State laws remain operative in all spheres until superseded by laws passed by the Federal Parliament in the exercise of its assigned powers. State laws, however, are invalid only to the extent of their inconsistency with valid Federal enactments.

The Senate consists of 36 members, six being elected in each State.

It is prescribed by the Constitution Act that the number of members in the House of Representatives shall be as nearly as practicable twice the number of senators. The number to be elected in each State is determined in the following manner: A quota is ascertained by dividing the number of people of the Commonwealth by twice the number of senators, then the number of the people of each State is divided by the quota. The result indicates the number of representatives for each State, one more member being chosen if on the division there is a remainder greater than one-half of the quota. It is provided also that at least five members shall be elected in each original State. The representation of the States may be adjusted in every fifth year.

The number of representatives elected from the various States to the House of Representatives in 1934 was as follows:—New South Wales, 28; Victoria, 20; Queensland, 10; South Australia, 6 (having lost one seat); Western Australia, 5; Tasmania, 5. In addition, one representative of the Northern Territory was elected to attend and participate in debates without having the right to vote except on a motion for the disallowance of any ordinance of the Northern Territory or on an amendment of any such motion.

For the purpose of electing representatives to the Senate of the Federal Parliament, each State is treated as one constituency, returning six members each for six years, three of whom retire triennially. The members of the House of Representatives are elected for three years from single-member constituencies. The system of voting is preferential, and the electoral system is similar to that of the State. In 1924 the Commonwealth Electoral Act was amended to make provision for compulsory voting.

The voting at elections of members of the House of Representatives from New South Wales since 1913 has been as shown below. Details relating to elections prior to 1913 appear in the 1931-32 edition of this Year Book at page 32:—

Year.	Electors Enrolled (Contested Divisions only).		Votes Recorded.		Percentage of Votes Re- corded to Electors Enrolled.			Informal Votes.	
	Men.	Women.	Men.	Women.	Men.	Women.	Total.	Number.	Proportion per cent.
1913	554,028	482,159	405,152	312,703	73·13	64·85	69·28	22,262	3·10
1914	491,086	429,906	351,172	257,581	71·51	59·92	66·10	14,816	2·43
1917	484,854	447,437	370,618	292,925	76·44	65·47	71·17	19,874	2·98
1919	527,779	508,129	385,614	308,183	73·06	60·65	66·97	26,517	3·82
1922	517,388	498,209	330,362	239,980	63·85	48·17	56·16	25,823	4·53
1925	640,533	627,214	531,678	563,215	90·81	89·80	90·31	21,389	1·87
1928	584,545	576,857	547,095	534,817	93·59	92·71	93·16	52,229	4·83
1929	624,068	614,550	591,438	583,007	94·77	94·87	94·82	33,158	2·82
1931	722,480	710,672	689,905	671,786	95·49	94·53	95·01	48,824	3·59
1934	771,456	759,973	739,222	728,090	95·82	95·80	95·81	48,801	3·33

The percentage of voters increased steadily at the elections during the period 1903-1913. The improvement was not continued in 1914, when the electoral contest was modified in consequence of the outbreak of war in Europe, but in 1917, when considerable political feeling was excited by the question of compulsory military service, the percentage was higher than at any Federal elections before the introduction of compulsory voting at the elections of 1925. The proportion of electors voting was higher at the election of 1934 than at any previous election.

At the Senate elections of 1934, the total number of votes cast was 1,467,312 of which 193,613 or 13·19 per cent. were informal. Included in the votes cast were 1,330,929 ordinary votes, 26,354 postal, 106,413 absent, 3,421 under section 121 (persons whose names were not on roll by reason of error, etc.), and 195 other declaration votes. The proportion of votes recorded to electors enrolled was 95·81 per cent.

#### FEDERAL REFERENDA.

Analyses of the voting on Federal questions previously submitted to referenda were shown in the 1921 edition of this Year Book at page 42, in the 1926-27 edition at page 47, and in the 1931-32 edition at page 32.

Two proposals for alteration of the Federal Constitution were submitted to the electors of Australia by referenda on 6th March, 1937. The bills to which approval was sought were (i) Constitution Alteration (Aviation) 1936, to confer upon the Commonwealth complete control over air navigation and aircraft within Australia; and (ii) Constitution Alteration (Marketing) 1936, to provide that the provisions of Section 92 of the Commonwealth of Australia Constitution Act, that trade, commerce and intercourse among the States shall be absolutely free, should not apply to laws with respect to marketing made by the Commonwealth Parliament and otherwise within its constitutional powers.

Voting was compulsory, and in New South Wales 94·26 per cent. of the electors recorded votes. Ballot papers were issued to 1,461,860 of the total number of 1,550,947 electors enrolled at date of the referenda, and comprised 1,290,456 ordinary votes, 19,909 postal votes, 148,008 absent votes, 3,325 votes by persons whose names were omitted from rolls by reason of

error, etc., and 162 other declaration votes. The proportion of informal votes was high—3.79 per cent. in New South Wales and 4.02 per cent. for the Commonwealth on the aviation question and 7.43 per cent. and 7.22 per cent., respectively, in respect of the marketing proposal.

The voting resulted as follows:—

Heading.	Votes cast.				Proportion of Effective Votes.	
	For.	Against.	Informal.	Total.	For.	Against.
Aviation—						
New South Wales...	664,589	741,821	55,450	1,461,860	47.25	52.75
Commonwealth ...	1,924,946	1,669,062	150,355	3,744,363	53.56	46.44
Marketing—						
New South Wales...	456,802	896,457	108,601	1,461,860	33.76	66.24
Commonwealth ...	1,259,808	2,214,388	270,167	3,744,363	36.26	63.74

Both proposals were rejected. Although for the Commonwealth as a whole there was a majority favouring the aviation proposals, only two States (Victoria and Queensland) recorded affirmative majorities. The marketing proposals were negatived in every State.

#### SEAT OF FEDERAL GOVERNMENT.

An outline of the provisions of the Constitution Act with respect to the seat of government and the development of the territory was published on page 48 of the Year Book for 1926-27. The Federal Parliament commenced its regular sittings at Canberra on 9th May, 1927.

#### LOCAL GOVERNMENT.

The constitution of Municipalities, Shires, County Councils and certain corporate bodies under the Crown, and the powers exercised by them, are described in the chapter "Local Government" of this Year Book.

## DEFENCE.

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UPON the inauguration of the Commonwealth the duty of providing for the defence of Australia devolved upon the Federal Government, and the Parliament of the Commonwealth has paramount power to legislate for the naval and military defence of Australia, and for the control of the forces to execute and maintain the federal laws. The Constitution provides that the States may not raise nor maintain forces, but enjoins the Commonwealth to protect every State against invasion, and, on the application of the executive government of the State, against domestic violence. It is provided in the Defence Act that the citizen forces may not be called out nor utilised in connection with an industrial dispute.

In terms of the Defence Act male citizens between the ages of 18 and 60 years are liable for service in the citizen forces for home defence in time of war. Male citizens are liable also to undergo military or naval training between the ages of 12 and 26 years.

The system of compulsory training was brought into operation on 1st January, 1911. The duration of the training in each year is prescribed by the Act, the trainees being liable for service in the following age groups:—Junior cadets, 12 to 14 years of age; senior cadets, 14 to 18 years; citizen forces, 18 to 26 years. The duration of the training was curtailed during the war period, also in 1921 and in 1922 owing to the resolutions passed at the Washington Conference on limitation of armaments. As from 1st November, 1929, all compulsory obligations under Part XII of the Defence Act were suspended and the forces were reconstituted on the basis of voluntary enlistment. The peace nucleus was reduced from 48,000 Citizen Forces and 16,000 Senior Cadets to 35,000 Militia Forces and 7,000 Senior Cadets. Under the voluntary system men from 18 to 40 years of age are enlisted in the Militia Forces for a first period of three years subject to annual re-engagement until reaching the retiring age of 48 years. The normal duration of training is twelve days per year, inclusive of six days continuous training in camp.

### *Senior Cadets.*

Formerly training was commenced by senior cadets in the year in which they reached the age of 17 years; one year later they were transferred to the citizen forces to undergo courses during a further period of three years. The training of boys under 16 years as part of the defence system was suspended in 1922, though they were still required to register during the months of January and February of the year in which they reached the age of 14 years.

The Senior Cadet Corps, in which enrolment is voluntary, is organised now on the following basis:—

#### (a) Detachments affiliated with Militia Units:—

Light Horse—Nil;

Infantry, Signals and A.S.C.—25 per cent. of the establishment of the Militia Unit;

Other Arms—20 per cent. of the establishment of the Militia Unit; and (b) Detachments consisting of pupils attending approved educational establishments. The ages for enrolment in the regimental detachments are 16 and 17 years, and in the school detachments over 14 years.

## TRAINING STRENGTH OF ACTIVE MILITARY FORCES.

Date.	*1 Mar., 1901.	30 June, 1913.	31 Dec., 1922.	1 Feb., 1929.	30 Sept., 1933.	31 Dec., 1934.	31 Dec., 1935.	31 Dec., 1936.
Commonwealth ...	28,886	34,537	37,156	47,931	28,466	29,269	28,061	36,063
New South Wales	9,772	12,105	14,561	18,825	10,518	10,578	10,344	13,016

\* Date of taking over the military forces from States by Commonwealth.

There was a marked increase in the number of trainees in 1936 as the result of the active campaign of recruitment in the latter half of that year.

The following table shows the strength of the Land Forces in the Commonwealth and New South Wales, classified according to the nature of the Service, on 31st December, 1936, in comparison with that of a year previously:—

Branch of Service.	Commonwealth.		New South Wales.	
	1935.	1936.	1935.	1936.
Permanent Forces ... ..	1,791	2,032	755	785
Militia Forces ... ..	26,270	34,031	9,589	12,231
Engineer and Railway Staff Corps... ..	61	57	13	12
Unattached List of Officers ... ..	213	188	75	67
Reserve of Officers ... ..	6,210	5,389	2,149	1,884
Chaplains ... ..	255	220	66	61
A. A. M. C. Reserve ... ..	1,482	1,466	543	531
Total ... ..	36,282	43,383	13,190	15,571

The strength of Militia Forces and Senior Cadets in New South Wales on 31st December, 1936, was as follow:—

Military Formation.	Militia Forces.	Senior Cadets.	
		Regimental Detachments.	Educational Establishments.
1st Cavalry Division ... ..	2,293	49	...
1st Division ... ..	4,331	449	731
2nd Division ... ..	4,671	755	485
2nd District Base ... ..	936	129	...
Total ... ..	12,231	1,382	1,216

*Royal Military College.*

This College was established in 1911 at Duntroon, in the Federal Capital Territory, for the purpose of providing trained officers for the permanent forces. In January, 1931, the College was transferred to Victoria Barracks, Sydney, but was re-transferred to Duntroon in February, 1937. Normally, candidates, to be eligible for selection for admission to the College, must be under the age of 20 years and have passed the requisite subjects at the public examinations for Intermediate or Leaving Certificates (or their equivalents) in the various States of the Commonwealth. Special provision is made, however, for members of the forces. Trainees who are over the age of 19 years may make application to the District Base Commandant and subject to passing the prescribed examinations in both military and civil subjects, may become eligible for selection for admission to the College.

*Rifle Clubs.*

On the 30th June, 1936, there were 286 rifle clubs in New South Wales administered by the District Base Commandant, 2nd Military District, with a total membership of 13,775, and in addition 20 clubs administered by other Military Districts, and 14 miniature rifle clubs, having a membership of 369. Members of rifle clubs must fire an annual course of musketry of three different practices, but do not undergo any drill.

For the purposes of administration, the control of rifle club activities reverted from the Secretary for Defence to the Military Board, with effect from 1st March, 1931. Government grants are made for the construction and maintenance of rifle ranges, etc., and 150 rounds of Mk. VII and 50 rounds of Mk. VI ammunition are issued free to each efficient member, with 7 rounds of Mk. VII and 25 rounds of Mk. VI ammunition for each new recruit.

Rifle Clubs form part of the Australian Military Force Reserve, and are linked up with the various Militia Infantry Battalions.

## NAVAL DEFENCE.

The Naval defence of Australia was undertaken by the Imperial Navy under agreement between the Imperial Government and the Governments of Australia and New Zealand until 1913, when the Imperial squadron was replaced by Australian war vessels.

In December, 1936, the Australian Squadron in commission consisted of 3 cruisers, one flotilla leader, 2 "V" class destroyers, and one sloop, with the sloop "Moresby" engaged on surveying duties, and in reserve, 1 cruiser, 1 seaplane carrier, 1 depot ship, 2 "V" class destroyers and 1 oiler. Another sloop, built at Cockatoo Island Dockyard, Sydney, was commissioned in January, 1937.

At 31st December, 1936, the sea-going force consisted of 362 officers and 3,875 ratings and the Auxiliary Services of 36 officers and 153 ratings. Ninety-nine per cent. of the personnel were Australians, the remainder being on loan from the Royal Navy.

Reserves of officers and men for the Royal Australian Navy are provided from the following sources, the number of personnel in December, 1935, being shown in brackets:—(a) Royal Australian Navy Emergency List (158 officers); (b) Royal Australian Fleet Reserve (360 men); (c) Royal Australian Naval Reserve (Seagoing) (58 officers); (d) Royal Australian Naval Reserve (198 officers and 3,205 men); (e) Royal Australian Naval Volunteer Reserve (87 officers and 85 men).

Junior officers are trained at the Naval College, Flinders Naval Depot, where 50 cadet midshipmen were undergoing training in January, 1937. The general depot of the Navy is at Western Port, Victoria, where the more advanced training of petty officers and men and the training of the men on first entry is conducted.

#### AIR DEFENCE.

A Royal Australian Air Force for defence purposes was established as a separate branch of the defence system on 31st March, 1921, by proclamation under the Defence Act. It formed part of the military forces until the Air Force Act was passed in September, 1923, to provide for its administration as a separate branch of the defence system; its predecessor, the Australian Air Corps, had formed part of the Military forces. To this force is entrusted the air defence of Australia and the training of personnel for co-operation with the Naval and Military forces. The present establishment of the force includes the following units:—

- (a) Headquarters Royal Australian Air Force, with representation in London;
- (b) An Air Force Station in Victoria comprising:—
  - Two Landplane Squadrons,
  - An Air-craft Depot,
  - A Recruit and Technical Training Squadron.
- (c) A Flying Training School;
- (d) An Air Force Station in New South Wales comprising:—
  - Two Landplane Squadrons,
  - One Amphibian Squadron,
  - An Aircraft Depot.

*Establishment.*—At 31st December, 1936, the approved establishment of the Permanent Air Force was 184 officers and 1,445 airman, and of the Citizen Air Force 39 officers and 235 airmen.

#### MUNITIONS SUPPLY.

The Munitions Supply Board, consisting of a Controller-General and two other members, is responsible, under the Minister for Defence, for the provision of armament, arms, ammunition, equipment and supplies and stores for the naval, military and air services of the Commonwealth.

In addition to factories in Victoria for the manufacture of ammunition, explosives, machine guns, etc., and clothing, the Board controls the Small Arms Factory at Lithgow, New South Wales. The factory was opened on 1st June, 1912, and is engaged in the manufacture of rifles and machine guns for land and air services, and provision has been made for the manufacture of machine guns. To 30th June, 1935, capital amounting to £843,155 had been invested in the Small Arms Factory. During the Great War the number of employees reached about 1,300. At 30th June, 1936, there were 282 hands employed.

## CHRONOLOGICAL TABLE OF EVENTS IN THE HISTORY OF NEW SOUTH WALES.

A brief historical sketch of New South Wales was published in the Official Year Book for 1929-30, at pages 40 to 52, and a chronological table of events in the history of New South Wales from 1770 to 1919 was published in the Official Year Book for 1919, at pages 1 to 8. This table is repeated below in a revised form as from 1901 with a continuation from 1920 to 1936.

- 1901 Federation of Australian Colonies—Interstate free-trade established—Industrial Arbitration Act (State)—Sydney Harbour Trust formed—Closer Settlement Act—Western Lands Act—Introduction of Pacific Islanders prohibited.
- 1902 Mt. Kembla Colliery Explosion (ninety-five lives lost)—Women's Franchise—Pacific Cable completed—First sitting of (State) Arbitration Court—Parliamentary Select Committee *re* Greater Sydney—First Federal Tariff.
- 1903 High Court of Australia inaugurated.
- 1904 Reduction of number of members of (State) Parliament from 125 to 90—Educational Reforms commenced—Patents, Trade Marks, &c., transferred to Commonwealth—Commonwealth Conciliation and Arbitration Act.
- 1905 Assisted Immigration reintroduced—Children's Courts instituted—Local Government (Shires) Act extending local government to whole State.
- 1906 Barren Jack (Burrinjuck) Dam authorised—Public School fees abolished—Sydney Central Railway Station opened.
- 1907 Invalidity and Accident Pensions—Telephone connected, Sydney-Melbourne—Opening of blast furnace for manufacture of iron and steel at Lithgow—Medical inspection of School Children initiated—"Harvester" Wage determined.
- 1908 Visit of United States (American) Fleet—Minimum Wage Act—Industrial Wages Boards constituted—Subventions to Friendly Societies Act—Yass-Canberra Federal Capital Site selected—Crown Lands Amendment Act (Conversions)—Cataract Dam completed—Private Hospitals Act.
- 1909 Fisher Library (Sydney University) opened—Old-age Pensions administration transferred to Commonwealth—Pure Food Act.
- 1910 Mitchell Library opened—Referenda favouring transfer of State Debts to Federal Government and rejecting proposed States finance agreement with Commonwealth—Australian Notes Act—Australian silver coinage issued—Saturday Half-holiday instituted in Sydney and the larger towns of N.S.W.—Workmen's Compensation Act—Federal Land Tax—Invalidity and Accidents Pensions administration transferred to Commonwealth—Arrival of "Yarra" and "Parramatta," first vessels of Australian Navy—Australian Penny Postage.
- 1911 First Australian Notes issue—Federal Referenda relating to monopolies and industrial legislation; proposals rejected—Federal Capital Site at Yass-Canberra transferred to Commonwealth—Compulsory defence training initiated—Murrumbidgee Irrigation Trust appointed—First wireless station (private) licensed for transaction of public business—Imperial Conference in London—Randwick wireless station transmitted messages over 2,000 miles—First section of North Coast Railway opened—Flight of first Australian Aviator (W. E. Hart) from Sydney to Penrith.
- 1912 Bursary Endowment, Secondary Education—Murray Waters Agreement—Murrumbidgee Irrigation Farms available, and irrigation commenced—Commonwealth Bank (Savings Bank Department) established—Commonwealth Maternity allowances—Sydney (Pennant Hills) Wireless Station opened.

- 1913 Federal Capital City named Canberra, and foundation stones laid—Visit of Dominions Royal Commission—British Trade Commissioners office established at Sydney—First elective Senate, University of Sydney—Arrival at Sydney (4th October) of Australian Fleet, including battle cruiser "Australia" and cruisers "Sydney" and "Melbourne"—Departure of (Imperial) Admiral King-Hall—First Cost of Living and Living Wage Inquiry in Industrial Arbitration Court—Appointment of Interstate Commission—Commonwealth Bank commenced ordinary banking business.
- 1914 Norfolk Island transferred to control of Commonwealth Government—First Aerial Mail, Melbourne to Sydney, carried by M. Guillaux—Direct telephone, Sydney to Adelaide, opened—Murray Waters Agreement (Premiers' Conference)—First Baby Clinic opened—State advances for homes initiated—European War—Expeditionary force of volunteers despatched to co-operate with Imperial forces—Australian Naval Unit transferred to direct Imperial control—Necessary Commodities Control and Wheat Acquisition Acts—War Precautions Act.
- 1915 Australian Expeditionary Forces in action at Dardanelles and in Egypt—Iron and steel works opened at Newcastle—Conservatorium of Music opened—War census—Commonwealth Powers (War) Act—Commonwealth Income Tax—Wheat harvest marketed by Australian Governments.
- 1916 Australian Expeditionary Forces in action in France—Liquor Referendum resulted in closing hotels at 6 p.m.—Fair Rents Court established—Valuation of Land Act—Eight Hours Act (48-hours week)—Soldiers Repatriation Fund established—Military Service Referendum rejected—Registration of private schools initiated—Workmen's Compensation law extended to all workers—Imperial Wool Purchase Scheme initiated.
- 1917 Transcontinental Railway opened—River Murray Waters Act in operation—Daylight Saving initiated and abandoned—Second Military Service Referendum rejected—Extensive industrial dislocation—Interstate Commission Prices investigation—War-time Profits Tax imposed.
- 1918 European War Armistice declared—N.S.W. Board of Trade constituted—Women's Legal Status Act passed—Commonwealth Repatriation Department created—Poor Persons Legal Remedies Act—Introduction of proportional representation at State Parliamentary elections.
- 1919 Peace signed between European Powers—State Housing scheme initiated—Influenza epidemic—Wheat Silos scheme initiated—First aeroplane flight, England to Australia (twenty-eight days) by Sir Ross and Sir Keith Smith—Commonwealth Royal Commission appointed to inquire into basic wage and cost of living—First Federal General Elections on preferential voting system—Federal Referenda; proposals to extend legislative powers and to provide for nationalisation of monopolies rejected.
- 1920 Compulsory school attendance introduced—Proportional representation and multiple electorates—Profiteering Prevention Act—Control of Note issue transferred to Commonwealth Note Board.
- 1921 Forty-four hour week introduced (State)—Voluntary wheat pool inaugurated—First direct wireless press message, England to Australia.
- 1922 Rural Bank established—Sydney Harbour Bridge Act—Conference of employers and employees (Sydney)—Reversion to 48-hour week (State).
- 1923 Agreement to extend certain Victorian Railways into New South Wales.
- 1924 Grafton-Kyogle-South Brisbane Railway Agreement—Migration Agreement with British Government on basis of £34,000,000 loan—Control of Notes Issue transferred to Commonwealth Bank Board.
- 1925 Main Roads Board established—Sydney Harbour Bridge commenced—Broadcasting stations established—Compulsory voting at Federal elections—Visit of American Fleet.

- 1926 First section of City Underground Railway opened—Electrification of suburban railway lines commenced—44-hour week re-introduced—Widows' pensions instituted—Workers' Compensation extended—Sydney Branch of Royal Mint ceased operations.
- 1927 First sitting of Federal Parliament at Canberra opened, 9th May—Commercial wireless communication established with England—Family Endowment instituted—Marketing of Primary Products Act—System of single seats and preferential voting introduced at State elections—Forty-four hour week (federal awards)—Western railway opened to Broken Hill.
- 1928 Financial Agreement signed between Australian States—Loan Council created—Prohibition proposal negated at referendum—Aeroplane flight, United States to Australia, by Kingsford-Smith and Ulm—Aeroplane flight, England to Australia, in sixteen days (Hindler)—Visit of British Economic Mission.
- 1929 Protracted disputes in timber and coal-mining industries—Royal Commission on Coal Industry—Compulsory voting at State elections—Suspension of compulsory military training.
- 1930 Wireless telephone service to England established—Reversion to 48-hour week (1st July)—Transport Trusts appointed—Unemployment Relief Tax imposed—Aeroplane flight, England to Australia, in 10½ days (Kingsford-Smith)—Acute economic depression—Moratorium Act—Prohibitive duties and embargoes placed on certain imports—Sales tax imposed—Brisbane-Kyogle railway opened.
- 1931 Forty-four hour week re-introduced (1st January)—Government Savings Bank of New South Wales suspended payment (22nd April)—Premiers' Financial Agreement (reduction of expenditure)—Commonwealth Conversion Loan (internal debts £556,000,000)—State Lottery initiated—New trade treaty, Australia and Canada—Government Savings Bank reopened and amalgamated with Commonwealth Savings Bank—Commonwealth wheat bounty—Flour "tax" levied—Legislation for reduction of interest and rents—Commonwealth Court cut wages 10 per cent.
- 1932 Sydney Harbour Bridge opened—Transport commissioners appointed to control transport services and main roads—Conflict between Commonwealth and State Government in reference to State's failure to meet obligations resulted in dismissal of State Cabinet by Governor—Imperial Economic Conference at Ottawa—Clarence River bridge opened; final link Albury to Brisbane standard gauge railway—Farmers' Relief Act passed—Conversion Loan successfully completed in London—Industrial Commission reconstituted.
- 1933 Record wheat harvest—Recovery of wool prices—Economic depression passing into early stages of recovery—World Economic Conference in London—New Legislative Council elected—Further conversion loans placed in London—Census, 30th June, 1933—Railway fares and freights reduced—Family Endowment Tax abolished.
- 1934 New Legislative Council constituted—Hume Reservoir completed—Recession in wool prices—Federal Wheat Commission—New States Boundaries Commission—Bread Enquiry—Visit of H.R.H. the Duke of Gloucester—Further successful conversion loans (London)—Revival of building industry—Berriquin irrigation scheme launched—England-Australia Air Mail inaugurated.
- 1935 Silver Jubilee of King George V—Visit of Japanese Goodwill Envoy—Sydney County Council (Electricity) formed—Loss of Sir Charles Kingsford Smith over Bay of Bengal—Partial recovery of wheat and wool prices—State industrial undertakings (brickworks, &c.) sold—Federal Banking Commission appointed.
- 1936 Death of H.M. King George V—Further conversion loan in London—Commonwealth imposed import quotas on certain commodities—Sharp rise in wheat prices—Construction of final section of City railway restarted—Abdication of H.M. King Edward VIII and accession of H.M. King George VI.
- 1937 Federal Aviation and Marketing Referenda, 6th March—Coronation of H. M. King George VI—Imperial Conference in London.

## PUBLIC FINANCE.

The collection and expenditure of public moneys in New South Wales are controlled by four authorities, viz.:—(1) The Government of the State of New South Wales; (2) the Government of the Commonwealth of Australia; (3) the Municipal, Shire, and County Councils (local governing bodies operating in defined areas); and (4) statutory bodies appointed by the Government to administer such public services as railways, tramways, water and sewerage, Sydney Harbour, irrigation, and main roads.

The governmental revenue of the State Government is derived mainly from taxes such as the income tax, stamp and probate duties, motor, betting, totalisator, racecourses admission and entertainment taxes, wages tax, special income tax, proceeds of the State lottery, fees for licenses, from the sale and leasing of its lands and forests, and from the contribution by the Commonwealth under the financial agreement of 1927. The expenditure of the State on governmental account includes the cost of such services as education, public health, hospitals, police, prisons, the State law courts, Industrial Commission and conciliation boards, navigation (in part), agriculture and lands administration, water conservation and irrigation, local government (administration and grants), widows' pensions, care of the destitute, administration of mining, fisheries, and factory laws, the construction of public works and unemployment relief.

The governmental revenue of the Commonwealth Government is derived mainly from the customs and excise and primage duties, income tax, land tax, estate duty, sales tax, and entertainments tax. Its expenditure is mainly in connection with repatriation services, old age and invalid pensions, maternity allowances, defence, lighthouses, navigation (in part), quarantine, bounties on production, the control of customs, meteorological observations, assistance in marketing operations, bankruptcy law (as proclaimed in August, 1928), the maintenance of a High Court and a Court of Industrial Arbitration.

Local governing bodies are required to levy a rate of not less than 1d. in the £1 on the unimproved capital value of lands within the areas administered by them, and, in some cases, they are empowered also to levy rates on the improved capital value. They provide minor services, such as the construction, maintenance, and lighting of streets and roads, the control and maintenance of public parks and recreation areas, the supervision of building operations, and, in some cases, the provision of water and sanitary services. In general the cost of these services is defrayed from the rates but not infrequently charges are imposed for special services rendered. In some instances loans are raised for expenditure on revenue services and are repaid by special or increased general taxation in the area concerned.

The revenue of the statutory bodies administering railways, tramways, Sydney harbour works, etc., is derived almost entirely from charges for the use of services which they administer, and all are ultimately subject to the control of the Government. Revenue by way of motor taxes is used by the Main Roads Board in the construction and maintenance of roads throughout the State.

State and Federal Governments each have power to raise loans on their own security subject to approval by the Australian Loan Council of the amounts and conditions. The constitution of the sinking fund and the management of the public debt are regulated by the Financial Agreement between the Commonwealth and States, which is described on page 91 hereof.

Municipalities and shires have power to raise loans under certain conditions. In the case of a municipality the total amount of loans must not exceed 20 per cent. of the unimproved value of the ratable land in its area, and, in the case of a shire, thrice its annual income.

Of the statutory bodies referred to, the Metropolitan Water, Sewerage and Drainage Board only has power to raise loans on its own initiative, but such loans are subject to the approval of the Governor and of the Australian Loan Council.

### TAXATION.

The following statement shows the amount of taxation collected in New South Wales by the State Government, and the rates and charges received by local bodies, etc., during the five years ended 30th June, 1936.

Head of Taxation, or Charge.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
<b>STATE.</b>					
	£	£	£	£	£
Income Tax ... ..	3,411,146	3,870,616	2,808,851	3,146,495	4,088,164
Unemployment Relief Tax ...	5,799,519	6,702,439	2,197,583	171,295	...
Special Income Tax ... ..	...	...	1,477,300	1,971,292	2,826,210
Wages Tax ... ..	...	...	1,573,404	3,120,034	3,364,082
Family Endowment Tax ...	930,264	2,490,034	998,914	37,778	71,132
Land Tax ... ..	2,453	1,968	2,199	2,461	2,034
Stamp and Probate Duties—					
Stamps ... ..	843,986	929,158	1,013,604	1,047,844	1,141,305
Betting Tickets ... ..	65,488	36,332	32,254	36,200	46,807
Probate ... ..	1,251,650	1,639,979	1,542,475	1,693,966	1,673,805
Betting Taxes ... ..	287,032	191,047	180,781	183,945	214,833
Totalisator Tax ... ..	122,049	104,231	110,567	119,790	115,611
Racecourses Admission Tax ..	76,992	71,459	78,780	82,016	87,787
Entertainments Tax ... ..	55,174	55,678	56,997	69,226	82,986
Fees for Registration of Dogs..	20,718	20,790	21,305	22,576	24,457
Other Licenses ... ..	371,448	331,040	333,090	351,188	386,441
<b>Total Governmental Taxation £</b>	<b>13,237,919</b>	<b>16,444,771</b>	<b>12,428,104</b>	<b>12,056,106</b>	<b>14,125,654</b>
<b>MOTOR TAX, LICENSES, etc.*—</b>					
Motor Tax ... ..	1,189,035	1,193,224	1,301,109	1,433,232	1,596,227
Motor Licenses ... ..	353,336	369,896	411,643	435,791	473,701
Motor Fees (Transport Act, 1930) ... ..	21,718	11,530	18,346	18,519	20,405
Motor Fees (Transport Co- ordination Act, 1931) ...	16,698	12,608	15,597	18,166	20,758
Motor Charges (Transport Co-ordination Act, 1931)..	36,600	20,896	24,133	28,957	52,977
<b>Total Motor Taxation etc.</b>	<b>1,617,387</b>	<b>1,608,154</b>	<b>1,770,828</b>	<b>1,934,665</b>	<b>2,164,068</b>
<b>Total, State Taxation £</b>	<b>14,855,306</b>	<b>18,052,925</b>	<b>14,198,932</b>	<b>13,990,771</b>	<b>16,289,722</b>

\* Most of the Motor Taxation included above is credited to the Main Roads Board, and not included as Governmental Revenue. (See page 53.)

## TAXATION—continued.

Head of Taxation, or Charge.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
LOCAL, ETC.					
Wharfage and Tonnage Rates	631,112	732,835	727,585	842,609	921,389
Municipal Rates*—					
City of Sydney ... ..	1,082,930	1,054,538	1,020,439	985,912	983,451
Suburban and Country ... ..	3,751,689	3,281,800	3,110,365	3,058,801	3,045,309
Shire Rates* ... ..	1,420,061	1,307,292	1,264,824	1,281,434	1,294,426
Water and Sewerage Rates etc.	3,024,648	3,040,509	2,699,801	2,672,492	2,773,341
Total, Local Rates and Charges ... ..	£ 9,910,440	9,416,974	8,823,014	8,841,248	9,017,916
Grand Total ... ..	£ 24,765,746	27,469,899	23,021,946	22,832,019	25,307,638

\* Year ended 31st December preceding; Harbour Bridge and Main Roads rates are included.

The Family Endowment Tax was first imposed as from 23rd July, 1927, and was abolished as from 1st January, 1934. The Unemployment Relief Tax was operative from 1st July, 1930, to 30th November, 1933. The rates and incidence of both taxes were altered from time to time. As from 1st December, 1933, the Unemployment Relief Tax was replaced by the Special Income Tax and the Wages Tax. Until 30th June, 1932, the proceeds of these taxes were credited to the Family Endowment Fund and the Unemployment Relief Fund respectively. Subsequently they have been credited to Consolidated Revenue Fund. Particulars of the former are shown in Part "Social Condition" of the Year Book and of the latter in Part "Employment." The method of receipt of the Unemployment Relief, Special Income and Wages taxes in each year are shown below:—

Year.	Sale of stamps and deductions from earnings.	Assessments on incomes.	Total collections.	Year.	Sale of stamps and deductions from earnings.	Assessments on incomes.	Total collections.
	£	£	£		£	£	£
1930-31 ...	2,720,887	1,654,916	4,375,803	1933-34 ...	3,165,178	2,083,109	5,248,287
1931-32 ...	4,014,399	1,785,120	5,799,519	1934-35 ...	3,120,034	2,142,587	5,262,621
1932-33 ...	3,718,960	2,983,479	6,702,439	1935-36 ...	3,364,082	2,826,210	6,190,292

The precise amount of Federal taxation which is borne by the people of New South Wales cannot be determined definitely. The amount of customs and excise revenue collected in the State is shown in part "Commerce" of this Year Book, but some of these taxes relate to goods consumed in other States. Federal land and income taxes paid by persons owning property and deriving income in more than one State are included in single assessments made by the Central Office, and cannot be allocated to the individual States except arbitrarily. The average amounts of Federal taxation per head of population in the Commonwealth were £8 4s. 8d. in 1931-32, and £8 10s. 0d., £8 9s. 6d., £8 15s. 4d., and £9 8s. 5d. in the succeeding years.

*Taxation per Head of Population.*

The amounts in the preceding tables stated in their equivalent rates per head of the total State population are shown below:—

Head of Taxation, or Charge.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
<b>STATE.</b>	<b>£ s. d.</b>	<b>£ s. d.</b>	<b>£ s. d.</b>	<b>£ s. d.</b>	<b>£ s. d.</b>
Income Tax ... ..	1 6 7	1 9 11	1 1 6	1 3 11	1 10 9
Unemployment Relief Tax ... ..	2 5 2	2 11 9	0 16 10	0 1 4	...
Special Income Tax ... ..	...	...	0 11 4	0 15 0	1 1 4
Wages Tax ... ..	...	...	0 12 0	1 3 8	1 5 4
Family Endowment Tax ... ..	0 7 3	0 19 2	0 7 8	0 0 3	0 0 6
Land Tax ... ..	...	...	...	...	...
<b>Stamp and Probate Duties—</b>					
Stamps ... ..	0 6 7	0 7 2	0 7 9	0 8 0	0 8 7
Betting Tickets ... ..	0 0 6	0 0 3	0 0 3	0 0 3	0 0 4
Probate ... ..	0 9 9	0 12 8	0 11 10	0 12 10	0 12 7
Betting Taxes ... ..	0 2 2	0 1 6	0 1 5	0 1 5	0 1 7
Totalisator Tax ... ..	0 1 0	0 0 10	0 0 10	0 0 11	0 0 11
Racecourses Admission Tax ... ..	0 0 7	0 0 7	0 0 7	0 0 7	0 0 8
Entertainments Tax ... ..	0 0 5	0 0 5	0 0 5	0 0 6	0 0 8
Fees for Registration of Dogs ... ..	0 0 2	0 0 2	0 0 2	0 0 2	0 0 2
Other Licenses ... ..	0 2 11	0 2 7	0 2 6	0 2 8	0 2 11
<b>Total Governmental Taxation.</b>	<b>5 3 1</b>	<b>6 7 0</b>	<b>4 15 1</b>	<b>4 11 6</b>	<b>5 6 4</b>
<b>MOTOR TAX LICENSES ETC.</b>					
Motor Tax ... ..	0 9 3	0 9 2	0 10 0	0 10 11	0 12 0
Motor Licenses ... ..	0 2 9	0 2 10	0 3 2	0 3 4	0 3 7
Motor Fees (Transport Act, 1930) ... ..	0 0 2	0 0 1	0 0 2	0 0 2	0 0 2
Motor Fees (Transport Co-ordination Act, 1931) ... ..	0 0 2	0 0 1	0 0 1	0 0 2	0 0 2
Motor Charges (Transport Co-ordination Act, 1931) ... ..	0 0 3	0 0 2	0 0 2	0 0 3	0 0 5
<b>Total, Motor Tax, etc.</b>	<b>0 12 7</b>	<b>0 12 4</b>	<b>0 13 7</b>	<b>0 14 10</b>	<b>0 16 4</b>
<b>Total State Taxation ... ..</b>	<b>5 15 8</b>	<b>6 19 4</b>	<b>5 8 8</b>	<b>5 6 4</b>	<b>6 2 8</b>
<b>LOCAL, ETC.</b>					
Wharfrage and Tonnage Rates ... ..	0 4 11	0 5 8	0 5 7	0 6 5	0 6 11
<b>Municipal Rates*—</b>					
City of Sydney ... ..	0 8 5	0 8 2	0 7 10	0 7 6	0 7 5
Suburban and Country ... ..	1 9 3	1 5 4	1 3 10	1 3 3	1 2 11
Shire Rates* ... ..	0 11 1	0 10 1	0 9 8	0 9 9	0 9 9
Water and Sewerage Rates etc. ... ..	1 3 7	1 3 6	1 0 7	1 0 3	1 0 10
<b>Total, Local Rates and Charges</b>	<b>3 17 3</b>	<b>3 12 9</b>	<b>3 7 6</b>	<b>3 7 2</b>	<b>3 7 10</b>
<b>Total, State and Local Taxation</b>	<b>9 12 11</b>	<b>10 12 1</b>	<b>8 16 2</b>	<b>8 13 6</b>	<b>9 10 6</b>

\* See footnote to table, on pages 44-5.

**STATE TAXES.***State Land Tax.*

Land tax is levied by the State only on the unincorporated districts of the Western Division where no local rates are imposed. The rate of tax is 1d. in the £ on the unimproved value. For the purpose of assessment a statutory deduction of £240 is made from the assessed value of the lands held by each individual. The amount of land tax collected in the year ended 30th June, 1936, was £2,034.

*State Income Tax.*

Income tax was first levied in New South Wales as from 1st January, 1896, and it has since been levied annually with, latterly, frequent changes of incidence. Incomes are assessed for taxation in the year following that in which they are derived, the returns for assessment being made up for the twelve months ended 30th June or such other date as is approved by the Commissioner.

The income tax law as revised in 1928, applied to the taxation of incomes derived in 1927-28 to 1934-35 inclusive. The field of taxation was extended by reducing the statutory deduction and by repealing certain exemptions. Special provisions were inserted to lessen opportunities for the avoidance of tax, and the rates in respect of the higher incomes were increased. In certain matters further concessional deductions were allowed.

In 1936, following the report of the Royal Commission on Taxation (1932) and the report of the Taxation Investigation Committee appointed by the Government of New South Wales, the law was again revised, chiefly with the object of obtaining more uniform methods of taxation as between the Commonwealth and various States. This necessitated minor alterations in the matter of assessable income and allowable deductions. The new Act applies to the taxation of incomes derived in 1935-36 and subsequent years.

*Exemptions.*—The incomes exempt from State income tax include the salary of the Governor-General and of the Governor of this State; the official salaries of the representatives in Australia of the government of other countries, of a foreign consul, a trade commissioner of any part of the British Empire other than Australia and members of their staff temporarily resident in Australia, subject to certain conditions as to reciprocity; the remuneration paid to a person not a resident of Australia for expert advice to the Government or as a member of a Royal Commission; income derived as representative of certain educational, scientific, religious and sporting associations visiting Australia; the revenue of a municipal corporation or other local governing body or public corporation; the income of religious, scientific, charitable or public educational institutions and of trade unions or associations of employers; Starr Bowkett and Rural Co-operative Societies registered under the Co-operation Act; societies not carried on for the gain of individual members being a friendly society or one established for the encouragement of music, art, science or literature, or for the development of aviation, or of the agricultural, pastoral, manufacturing or industrial resources of Australia; incomes of provident and superannuation funds and trust funds for public charitable purposes; pensions paid under the Australian Soldiers' Repatriation Act, 1920-1934; income derived from gold-mining in Australia, Papua or New Guinea; interest on bonds, debentures, stock or other securities issued by the Commonwealth and New South Wales Governments and certain stocks issued by the Rural Bank of New South Wales.

*Assessable Income.*—In addition to the items set out in the Act, which include certain capital profits, any receipt in the nature of income is assessable unless exempted under the Act. A resident of New South Wales is liable to tax upon income derived in New South Wales and also upon certain classes of income derived outside New South Wales, *e.g.*, salaries and wages earned whilst temporarily absent from the State, certain interest, dividends (with certain exceptions), and profits on the sale of goods, etc., where not taxed in the place of sale. A non-resident of New South Wales is assessable upon income derived or deemed to be derived in New South Wales.

*Taxable Income*, broadly speaking, is gross income less expenses incurred in earning it and, except in respect of companies, less the concessional deductions and statutory exemption.

*Concessional deductions* and *statutory exemption* are allowed firstly from Personal Exertion Income and, secondly, from Property Income.

*Concessional deductions* allowed to taxpayers (other than companies) domiciled in New South Wales—£50 in respect of the wife or one relative, provided in the latter case at least £50 was expended on maintenance (the deduction is not allowed where the wife or relative derived a net income in excess of £100); £50 for each child under the age of 16 years; medical expenses not exceeding £50 and funeral expenses not exceeding £20 for taxpayer, his wife and children under 21 years; dental expenses where the taxable income does not exceed £400 and where the aggregate does not exceed £100; life assurance premiums, superannuation, payments to friendly societies.

Certain other consequential deductions are allowable, *e.g.*, gifts to public bodies such as a hospital, a benevolent institution, an authority engaged in research into causes, prevention or cure of disease in human beings, animals or plants, a university, library, museum, art gallery, public memorial in New South Wales relating to the Great War, a public fund for benefit of returned soldiers; sums paid or set apart as pensions or retiring allowances for the personal benefit of employees who are or were employed in the taxpayer's business.

*Statutory exemption* allowable in the case of a taxpayer, other than a company, domiciled in New South Wales is £250 less £1 for every £8 by which the income exceeds £250. That allowable in the case of a taxpayer other than a company, not domiciled in New South Wales, is £50 less £1 for every £8 by which the income exceeds £50.

*Rate of Tax—Individuals.*—The taxable income from personal exertion is reduced by one-fifth or £900, whichever is the less, the remainder plus the taxable property income, if any, is charged with the following rate:—

(a) On income not exceeding £5,500.

$$\frac{85}{100} \times \left( 9d. + \frac{\text{Taxable income} \times 3}{500} \right) \text{ pence in the } \pounds.$$

(b) On income exceeding £5,500.

£5,500 at 35.7 pence in £.

Balance at 51 pence in £.

Where income is derived from agricultural or pastoral pursuits, the income on which tax is payable is arrived at in this manner, and the rate is determined by averaging the whole income over a period of not more than five years.

*Minimum Tax.*—The minimum amount of tax is 10s.

*Companies.*—Tax is levied on the net income of a company. Dividends paid by companies are assessable in the hands of the shareholder. A rebate of tax is allowed of the lesser amount of (a) the tax on the dividends calculated at the rate payable by companies for the year of income, or (b) the amount of additional tax due to the inclusion of dividends in the shareholder's assessment.

*Rates of Tax for Companies.*—Other than Mutual Life Assurance Companies, 2s. 3d. in £; Mutual Life Assurance Companies, 1s. 6d. in £; Non-Mutual Life Assurance Companies, upon the profits of life assurance distributed to shareholders 1s. 6d. in £, and 2s. 3d. in the £ on the balance. On interest paid or credited by a company to non-residents on debentures used in the State, or money lodged at interest with the company in the State, 1s. 6d. in the £.

The statistics published by the State Income Tax Commissioner since those for assessments made in 1910-11 have been very scanty, but the following data have been made available:—

Returns Supplied in year ended 30th June.*	Companies.		Individuals.		Total Amount of Tax Assessed.
	Number Assessed.	Amount of Tax Assessed.	Number Assessed.	Amount of Tax Assessed.	
		£		£	£
1921	2,201	2,344,043	68,599	2,472,281	4,816,324
1922	2,201	2,258,441	97,334	2,148,370	4,406,811
1923	2,236	2,326,141	101,578	2,092,461	4,418,602
1924	2,720	2,757,822	111,528	2,156,641	4,914,463
1925	3,068	3,104,151	120,557	1,970,845	5,074,996
1926	3,338	3,692,863	85,795	2,054,146	5,747,009
1927†	3,478	4,342,248	83,775	1,788,424	6,130,672
1928§	3,190	4,500,000	93,238	2,000,000	6,500,000
1929	4,178	4,972,162	138,280	3,333,290	8,305,452
1930	4,452	4,515,185	142,972	3,087,309	7,602,494
1931	3,851	3,190,958	128,968	2,256,195	5,447,153
1932	2,838	1,970,643	84,728	1,219,525	3,190,168
1933	2,557	1,717,263	66,484	920,269	2,637,532
1934	2,515	1,772,582	59,537	787,044	2,559,626
1935	2,646	2,044,830	64,287	1,028,006	3,072,836
1936	3,549	2,577,356	74,211	1,146,202	3,723,558

\* The assessments relate to income derived in the previous year ended 30th June.

† Partly estimated.

§ Approximate.

In considering the variations in the number of assessments and the amount of tax assessed from year to year, due allowance should be made for changes in the rates and incidence of the tax. Particulars for the years ended 30th June, 1928, were shown in the Year Book for 1927-28 on page 397. In 1928-29 the taxable field and rates of tax were increased substantially. These remained practically unchanged in 1929-30, 1930-31 and 1931-32. In 1932-33 rates of tax were reduced by approximately 10 per cent., and this reduction has applied since.

A summary of assessments actually issued, amounts collected, and carry-over in each of the past four years is provided below. The transactions of individual years presented in this way do not relate to the income derived in any individual year, but to the actual time of issuing assessments:—

Heading.	Years ended 30th June.				
	1932.	1933.	1934.	1935.	1936.
Tax Assessed—	£	£	£	£	£
Net Tax Assessed and Levied	3,639,175	3,563,115	2,637,137	3,133,377	4,124,984
Miscellaneous Items ...	8,643	2,261	848	3,189	4,140
Net Tax unpaid from previous year... ..	1,205,524	1,413,699	1,068,542	893,622	780,357
Total Receivable ...	4,853,342	4,979,075	3,736,527	4,030,188	4,909,481
Tax Collected—					
Net collections, amounts written off, etc. ...	3,439,643	3,910,533	2,842,905	3,249,831	4,236,900
Unpaid Tax carried forward to succeeding year ... £	1,413,699	1,068,542	893,622	780,357	672,581

The amount of unpaid tax as at 30th June, 1936 (£672,581), representing 16.31 per cent. of the net tax assessed and levied during the year, was distributed as follows, according to years of assessment:—1934-35, £161,077; 1933-34, £6,730; 1932-33, £23,241; 1931-32, £56,383; 1930-31 and previous years, £425,150.

The amounts actually collected during each of the five years 1931-32 to 1935-36 are shown on page 44 hereof. Collections during 1935-36, viz., £4,088,164, consisted of £3,530,692 from assessments on the taxable income in the year, and £557,472 in respect of tax assessed on income of previous years and miscellaneous items.

### *State Probate Duties.*

Probate Duties have been imposed as a State Tax continuously since 1880. The rates of probate duty payable on estates of persons dying on or after 1st November, 1933, are as follows:—

Estates of deceased persons dying domiciled in New South Wales.

Not exceeding £500—Exempt.

Exceeding £500 but not exceeding £1,000	2 per cent.
1,000 " " " 2,000	2½ per cent.
" 2,000 " " 3,000	2¾ per cent.
" 3,000 " " 4,000	2¾ per cent.
" 4,000 " " 5,000	3 per cent.
" 5,000 " " 6,000	3½ per cent.

and increasing by steps of ¼ per cent. per £1,000 up to 17 per cent. on estates valued at £60,001 to £61,000.

Over £61,000 but not over £62,000 the rate is 17½ per cent., increasing by steps of ½ per cent. per £1,000 to 24½ per cent. on £100,000. On estates valued at over £100,000 the rate of tax is 25 per cent.

Where the net value of the estate does not exceed £1,000 any property passing to the widow and/or children under 21 years of age is exempt from duty, and where the net value of the estate exceeds £1,000 but not £5,000, if property passes to the widow and children under 21 years, duty is assessed at half rates thereon, but this concession applies only in the case of local domicile.

On estates of deceased persons dying domiciled outside New South Wales the rates of tax are as follow:—

Not exceeding £500	3 per cent.
Exceeding £500 but not exceeding £1,000	3½ per cent.
" £1,000 " " 2,000	3¾ per cent.

and increasing by steps of ¼ per cent. per £1,000 to 20 per cent. on estates valued at £50,001 to £51,000. On estates valued at over £51,000 but under £52,000 the rate of tax is 20½ per cent., increasing by steps of ½ per cent. per £1,000 to 24½ per cent. on £75,000. On estates valued at over £75,000 the rate of tax is 25 per cent.

The tax is due and payable on assessment or within six months after the death of the deceased.

The dutiable value of the estate of a deceased person is the assessed value of all property of the deceased situated in New South Wales at his death, and in case of persons deceased since 31st March, 1931, domiciled in New South Wales, personal property outside New South Wales. It includes all property disposed of by trust to take effect after his death; any gift made by him within three years of his death (inclusive of any money paid

or property transferred by him without equivalent consideration other than by way of gifts for charitable or patriotic purposes); any property so disposed of that a life interest therein was reserved to deceased or that deceased reserved power to restore to himself; any gift not assumed by the donee to the entire exclusion of deceased; any property comprised in a *donatio mortis causa*; any property vested by deceased in himself and another jointly, so that the beneficial interest therein passes to such other person on the death of deceased; money payable under policy of assurance on the life of deceased kept paid by him for the benefit of a beneficiary; any annuity purchased by deceased to accrue at his death to a beneficiary; any property over which deceased at his death had general power of appointment; any property which on death of deceased passes to any other person by virtue of an agreement made by deceased to the extent which the value of the property exceeds the value of the consideration; any property which deceased had within three years of his death vested in a private company in consideration of shares or an interest in the company.

Whether deceased was domiciled in New South Wales or not at the time of his death, his estate includes every specialty debt secured to him over property in New South Wales. Where duty is paid on personal property situate outside New South Wales, in any part of His Majesty's Dominions, a refund will be allowed of either the duty paid in the Dominion or the duty paid in New South Wales, whichever is the lesser.

Deductions are allowed in respect of all debts actually due and owing by deceased.

Particulars of the amount of probate duty collected in each of the past five years are shown on page 44. The number and values of estates assessed annually are shown in the part of this Year Book relating to "Private Finance," and in greater detail in the Statistical Register.

#### *State Stamp Duties.*

Stamp Duty is imposed on a considerable number of legal and commercial documents, such as acknowledgments under Wills, Probate and Administration Act, 1898, agreements, appointments of trustees and receivers, appointments of property in execution of powers of appointment, awards, bank notes, betting tickets, bills of exchange and promissory notes, bills of lading, charter parties, memoranda and articles of association, certificates of incorporation of companies, contract notes for sale of marketable securities, conveyances of property, declarations of trust, deeds of all kinds, foreclosure orders, guarantees, hire purchase agreements, leases, letters of allotment and letters of renunciation of shares in companies, letters or powers of attorney, partitions, policies of insurance (other than life), Real Property applications, Real Property transfers, certain transmission applications and consents to transmission applications by executors or administrators, applications for merger, applications for discharge or modification of restrictive covenants, receipts or discharges given for payments of money or bills of exchange, including cheques amounting to £2 and upwards (other than wages, salaries, etc.), transfers of shares, etc. Certain exemptions in all cases are laid down in the Stamp Duties Act, and specifically in other statutes, notably in regard to documents of particular organisations not operating for profit. The rates of certain stamp duties were reduced as from 1st November, 1933.

The amount of Stamp Duty collected in each of the past five years is shown on page 44.

*State Taxes on Betting and Horse and Dog Racing.*

The following table shows the total amount of taxation in connection with betting and horse and dog-racing during each of the last eleven years:—

Year ended 30th June.	Racing Clubs and Associations.	Book-makers Licenses	Book-makers Tax. (Turnover)	Betting Tickets Stamp Duty.	Totalisator Tax.	Race-courses Admission Tax.	Winning Bets Tax.	Total.
	£	£	£	£	£	£	£	£
1926	65,434	40,210	.....	118,624	237,431	137,903	.....	599,602
1927	68,149	42,808	.....	125,645	233,867	143,608	.....	614,077
1928	73,136	41,391	.....	124,059	201,008	136,175	.....	575,769
1929	71,785	41,342	.....	119,351	193,868	129,713	.....	556,059
1930	68,704	38,507	.....	116,933	193,172	129,320	.....	546,636
1931	57,676	30,947	.....	75,674	142,939	86,579	227,650	621,465
1932	53,202	29,732	.....	65,488	122,049	76,992	204,098	551,561
1933	56,341	31,273	76,065	36,332	104,231	71,459	27,368	403,069
1934	47,519	28,904	104,171	32,254	110,567	78,780	187	402,382
1935	49,289	33,125	101,463	36,200	119,790	82,016	68	421,931
1936	59,585	37,916	117,302	46,807	115,611	87,787	30	465,038

Of the total taxation in each of the last two years, £39,524 in 1934-35 and £71,119 in 1935-36 were in respect of greyhound racing.

Further references to these taxes are contained in part "Social Condition" of this Year Book.

*State Betting Taxes.*

The Finance (Taxation) Act, 1915, and amending Acts, imposed taxes on racing clubs and associations, on bookmakers, and on betting tickets. The last-named tax is now imposed by the Stamp Duties Act, 1924.

Taxes in respect of racing clubs are levied on licenses and fees received from bookmakers. The existing rates range from 50 per cent. on racecourses within 40 miles of the General Post Office, Sydney, to 20 per cent. on courses outside that limit.

The taxes payable by bookmakers are regulated according to the particular courses and enclosures where operations are carried on, and they vary considerably.

The Act of 1915 further provided for the imposition of a stamp duty on all betting tickets issued by bookmakers, the amount being one penny in the saddling paddock, and one-halfpenny for the other parts of the racecourse. During 1917 these rates were doubled, and in 1920 the amount on the paddock tickets was increased to threepence, but the other rates were not altered. As from the 1st October, 1932, the rates reverted to one penny in the saddling paddock and one-halfpenny for the other parts of the racecourse. In addition to these amounts, bookmakers are required to furnish a monthly statement showing the number of credit bets made, the duty on them being the same as if tickets had been issued.

In terms of the Winning Bets Taxation Acts, as from 20th December, 1930, a tax was imposed at the rate of one shilling in each ten shillings of the amount of each winning bet, but as from 26th November, 1931, the amount of the wager was excluded from the taxable amount. The tax was abolished as from 1st October, 1932, and was replaced by a turnover tax upon the operations of bookmakers at the rate of 1 per cent. of the total amount of bets made by backers with any bookmaker upon any event relating to a horse race or to greyhound racing.

*State Totalisator Tax.*

Under the Totalisator Act passed on 20th December, 1916, amended in 1919, 1920, and 1927, registered racing clubs and associations must establish an approved totalisator if so directed by the Government. The commission to be deducted by the clubs and associations from the total amount invested by patrons is  $12\frac{1}{2}$  per cent. Of this the Colonial Treasurer receives from the Australian Jockey Club and the metropolitan clubs racing for profit (with the exception of trotting clubs) 9 per cent. of the total payments into the machine, and from other clubs (including metropolitan trotting clubs)  $5\frac{1}{2}$  per cent.

*State Racecourses Admission Tax.*

An Act enabling the Government to levy a tax on persons entering racecourses came into operation on the 1st October, 1920, and an amending Act was passed on the 31st December, 1920. The Acts apply to racecourses within 40 miles of the General Post Office, Sydney, and to the racecourse of the Newcastle Jockey Club. The rates vary from 2d. to 3s. 4d. on the charges for admission, the highest rate being levied on admission of males to the saddling paddock at Randwick. Members of racing clubs and season ticket-holders are required to pay a tax equal to 40 per cent. on the amount of their annual subscriptions.

In order to carry out the provisions of this Act, racing clubs are compelled to furnish returns of the number of persons who paid for admission and the number of members and season-ticket holders.

*State Entertainments Tax.*

A tax on entertainments was imposed by the State Government as from 1st January, 1930. Entertainments for purely philanthropic, religious, public, educational, or charitable objects are exempt, also race meetings taxable under the Racecourses Admission Tax Act. The entertainments tax is collected on the payments for admission at the following rates, those which do not exceed 1s. 6d. being free from taxation:—Over 1s. 6d. and under 2s., tax  $\frac{1}{2}$ d.; 2s. and over, tax 1d. for the first 2s. and  $\frac{1}{2}$ d. for each additional 6d. The amounts collected during recent years are shown on page 44.

*State Motor Taxes.*

Particulars of the rates and amount of taxes on motor vehicles, and fees for licenses in respect thereof, and the allocation of the proceeds, are shown in part "Transport" of this Year Book.

Between 1st July, 1924, and 30th June, 1929, except in the year ended 30th June, 1927, when special provisions operated (as explained on page 394 of the Year Book for 1926-27), 90 per cent. of the proceeds of taxes, fees and fines collected under the Motor Traffic Acts, the Motor Vehicle (Taxation) Acts, and the Metropolitan Traffic Acts, were paid into the funds of the Main Roads Department. The remaining 10 per cent. of this revenue was credited to Consolidated Revenue Fund to cover the cost of collection.

As from 1st July, 1929, the disposition of motor taxes was determined under the Transport Act, 1930, which provided that the amount to be paid to Consolidated Revenue to cover the cost of collection should be reduced to 5 per cent. of the total taxes collected, other than taxes on certain public vehicles, and that fines for traffic offences should also be paid to Consolidated Revenue. The 5 per cent. recoups paid to Consolidated Revenue were:—£57,026 in 1931-32; £58,273 in 1932-33; £62,734 in 1933-34; £69,077 in 1934-35 and £37,197 in 1935-36, the last-mentioned amount being for the half-year ended 31st December, 1935, on which date the recoups to Consolidated Revenue Fund ceased. As from the same date—1st July,

1929—the Road Transport and Traffic Fund was established, into which the registration and license fees on all vehicles, except certain public vehicles, were made payable to meet the cost of administering the registration of vehicles and collection of taxation, the payment of a contribution towards the cost of police supervision of motor vehicles, the payment of a contribution towards the cost of maintaining road pavements in the vicinity of tram tracks, the provision of traffic facilities, and other minor purposes. It was provided also that any balance remaining in the fund at the end of a financial year should become payable to the Country Main Roads Fund, which had been established in 1924 under the Main Roads Act for the purpose of financing work on main roads in the country. The balances so paid over at the end of each of the six years 1930-31 to 1935-36 were, respectively, £82,832, £95,809, £108,707, £177,284, £136,132 and £164,510. The amounts credited towards the cost of police supervision were £219,600 in 1929-30; £255,728 in 1930-31; £170,486 in 1931-32; £173,485 in 1932-33; £155,032 in 1933-34; £203,420 in 1934-35, and £194,787 in 1935-36.

For the purpose of providing additional subsidies to Local Government bodies for main road construction and maintenance, the Main Roads (Amendment) Act, 1936, provided that the whole of the amount collected by the State from the taxation of motor vehicles should be reserved for expenditure on main roads.

The whole of the amount received by New South Wales from the Commonwealth in respect of a proportion of the customs and excise duties on petrol is expended on main roads.

The amounts of motor taxation made available for the construction and maintenance of main roads from 1925-26 to 1935-36 were as follow:—

Year.	Amount.
	£
1925-26 (a) .. .. .	1,473,494
1926-27 .. .. .	564,835
1927-28 .. .. .	1,337,288
1928-29 .. .. .	1,555,697
1929-30 .. .. .	1,526,647
1930-31 .. .. .	1,258,885
1931-32 .. .. .	1,181,220
1932-33 .. .. .	1,228,720
1933-34 .. .. .	1,374,053
1934-35 .. .. .	1,460,155
1935-36 .. .. .	1,797,934
Total .. .. .	£14,758,928

(a) From 1st January, 1925.

The above amounts include expenditure of the balance made available from the Road Transport and Traffic Fund at the end of each year, but in addition to these balances and to the recoups to Consolidated Revenue for police supervision, the following amounts were expended from that fund, in 1930-31, £76,385; in 1931-32, £99,915; in 1932-33, £99,922; in 1933-34, £92,997; in 1934-35, £111,066, and in 1935-36, £129,752.

As distinct from the charges imposed on motor vehicles for traffic supervision and for the upkeep of the roads, a special licensing fee of 5s. per annum became payable in 1931 under the Transport Co-ordination Act in respect of vehicles used for the carriage of goods or for the public carriage of passengers in competition with the Railway and Tramway services. These fees are credited to the Transport Co-ordination Fund, which receives also certain revenue from vehicles used on roads where railway facilities are provided. The proceeds are used to meet the cost of administering the

Act, and as contributions towards the Railway and Tramway Revenues, which benefited during the year 1935-6 by £22,056 and £119 respectively, as compared with £18,453 and £5,038 in the previous years. Since the inception of the fund the Railway Fund has received £84,579 and the Tramway Funds £11,217.

#### *Family Endowment Tax.*

In order to provide the funds necessary for making effective the provisions of the Family Endowment Act for the payment of allowances in respect of dependent children, a tax was imposed on the amount of wages paid by employers as from 23rd July, 1927. The tax was paid by employers except those who paid less than £150 in wages in the twelve months immediately preceding the period of assessment, and employers who were public hospitals or public benevolent or charitable institutions. Wages paid to employers' children and to domestic servants were exempt and instrumentalities of the Federal Government were not taxable. The tax was assessed on quarterly returns lodged with the State Commissioner of Taxation until 1st January, 1932, when it became payable by stamps affixed to pay sheets.

The rate of the Family Endowment Tax and the principal changes in basis of assessment were set out on page 383 of the Year Book for 1931-32.

By the Taxation Reduction Act, 1933, the tax was abolished as from 1st January, 1934. As from 1st July, 1932, the proceeds of the tax were paid into Consolidated Revenue Fund.

A description of the family endowment scheme is published in part "Social Condition" of the Year Book.

#### *Unemployment Relief Tax.*

The Unemployment Relief Tax Acts passed in June and December, 1930, and in June, 1931 and 1932, were described on page 643 of the Year Book for 1930-31. The Prevention and Relief of Unemployment (Income from Employment) Act, which operated from 1st October, 1932, to 1st December, 1933, was described on page 384 of the Year Book for 1931-32. Unemployment Relief Tax received during 1933-34 amounted to £2,197,583, and to £171,295 in 1934-35.

In terms of the Taxation Reduction Act, 1933, a Special Income Tax and a Wages Tax replaced as from 1st December, 1933, those formerly imposed under the Unemployment Relief Tax Acts.

#### *Special Income Tax.*

This tax was first levied as from 1st December, 1933, when, with the Wages Tax, it replaced the Unemployment Relief Tax. Particulars relating to the rates operating until 1934-35 were shown on page 134 of the Year Book for 1934-35.

*Net Assessable income* is calculated in a manner similar to taxable income under the Income Tax Act, but deductions of a concessional nature, *e.g.*, for children, are not allowable. In the case of a resident, income derived from any source outside New South Wales, other than from wages or from carrying on of a trade or business, not being an investment business, is liable to the tax.

*Exemptions.*—The incomes exempt from Special Income Tax include the incomes, revenues and funds exempt from Income Tax; old age, invalid, war and widows' pensions and allowances under the Family Endowment and Child Welfare Acts; Government Relief; the wages of crews employed on ships trading between Australia and New Zealand and on New Zealand articles; the income of life assurance companies other than that appropriated for the payment of dividends; income of a person domiciled in New

South Wales whose total income from all sources does not exceed £100; and income from property by a person ordinarily resident in a reciprocating State. At present Victoria only reciprocates.

1935-36.

The rates of tax payable on income derived during the year 1935-36 were as follow:—

Net Assessable Income.	Rate of Tax per £1.		
	1st £100.	2nd £100.	Balance.
	d.	d.	d.
Not exceeding £156 .. .. .	3	—	8
Over £156 but not over £200 .. .. .	4	—	8
Over £200 but not over £250 .. .. .	5	8	10
Over £250 .. .. .	6	8	10

Where income is derived partly from wages and partly from other sources, the rate is calculated in regard to the total income.

The net amount received as Special Income Tax to 30th June, 1934 was £1,477,300. Receipts during 1934-35 amounted to £1,971,292. Receipts of Special Income Tax and arrears of Unemployment Relief Tax in 1935-36 amounted to £2,882,112.

#### Wages Tax.

Wages Tax was levied at the following rates on incomes from wages, salary, etc., derived on and after 1st December, 1933—if the rate of pay was not less than 40s. per week, or the equivalent hourly or daily rate. Wages in respect of declared relief work were exempt.

- (1) Where income from wages, salary, etc., did not exceed £3 10s. per week, the tax on earnings not less than £2 and not more than £2 10s. per week was 9d.; on earnings exceeding £2 10s. and not more than £3 per week, 1s. 3d. per week; on earnings exceeding £3 per week, but not exceeding £3 10s. per week, 1s. 9d. per week.
- (2) Where income from wages, salary, etc., exceeded £3 10s. per week, the tax on the first £2 of earnings was 6d. in the £, on the next £2 the tax was 1d. in each 2s. 6d. thereof, on the remainder of earnings in excess of £4 per week the tax was 1d. in each 2s. thereof.

Exemption in respect of income from employment was in respect of wages, etc., where the rate was less than £2 per week.

Since 1st January, 1936, the tax payable has been as follows:—Where income from wages is less than £5 per week the tax is,

Weekly wages.	Tax.
	s. d.
£2 and not over £2 10s. ....	0 6
Over £2 10s. and not over £3 .....	0 9
Over £3 and not over £3 10s. ....	1 3
Over £3 10s. and less than £3 12s. 6d. ....	1 6
Rising by 1d. for each additional 2s. 6d. to £3 17s. 6d. and less than £4 .....	1 9
Rising by 2d. and 1d. alternately for each additional 2s. to £4 18s. and less than £5 .....	3 0

Where income from wages is *not less* than £5 per week the rates are—  
On so much of the income from wages in a week,

	Rates of Tax.
as does not exceed £2 .....	6d. in each £
as exceeds £2 and does not exceed £4 ....	8d. in each £
as exceeds £4 .....	1d. in each 2s.

Net receipts from Wages Tax during 1933-34 amounted to £1,575,404, to £3,120,034 during 1934-35, and to £3,366,836 during 1935-36.

*Wages Tax and Special Income Tax, 1937-38.*

The Budget for 1937-38 provided that on or before 1st December, 1937, incomes up to £3 per week will be exempt. Tax on other incomes will be reduced in the following proportions:—Incomes £3 to £4 by  $\frac{1}{3}$ ; £4 to £5 by  $\frac{1}{4}$ ; £5 to £6 by  $\frac{1}{5}$ , and £6 to £20 by  $\frac{1}{10}$ . Tax will be further reduced by 6d. per week for each dependant (wife and children under 16). Pensions in incomes of £200 or less will be exempt from tax.

## COMMONWEALTH TAXES.

*Federal Land Tax.*

The first direct taxation by the Federal Government was the land tax imposed in 1910. This is a graduated tax on the unimproved value of the lands in the Commonwealth. In the case of landowners who are not absentees, an amount of £5,000 is exempt from taxation, and the rate of tax is  $1\frac{1}{18750}$ d. for the first £1 of value in excess of that amount, increasing uniformly to 5d. in the £ on a taxable balance of £75,000, with 9d. in the £ for every £ in excess of that amount. Absentee owners are required to pay 1d. in the £ up to £5,000, with a uniform progression from  $2\frac{1}{18750}$ d. to 6d. for the next £75,000. On every £ in excess of £80,000, the rate payable is 10d. The amount of tax payable on assessments made for financial years commencing on 1st July, 1927, was reduced by 10 per cent. of the amounts determined under the foregoing rates. In terms of the Financial Relief Act of 1932 the amounts of tax remaining for the year 1932-33, after the reduction of 10 per cent., were reduced by one-third.

In terms of the Financial Relief Act of 1933, the one-third reduction which operated for the year 1932-33 was replaced by a reduction of one-half for the year 1933-34. This reduction has been continued since.

Lands exempt from taxation are those owned by a State, municipality, or other public authority, by savings banks, friendly societies, or trade unions, and those used for religious, charitable, or educational purposes, grounds owned by clubs, etc., and used for sports (except golf and horse-racing), and pastoral lands leased from the Crown.

The following table gives particulars regarding taxable lands held in New South Wales at the 30th June each year, 1929 to 1935. More detailed information for each State and for the Commonwealth is shown in the annual reports of the Commonwealth Commissioner of Taxation.

Taxable Lands held at 30th June.	Improved Value.		Unimproved Value.		Tax Assessed.		Area of Country Lands Assessed.
	Town.	Country.	Town.	Country.	Town.	Country.	
	£000.	£000.	£000.	£000.	£	£	acres 000.
1929	132,616	119,629	72,336	61,343	967,200	500,400	31,728
1930	142,828	120,618	80,106	64,698	1,035,636	547,682	32,325
1931	129,350	105,941	68,416	54,458	800,223	405,384	31,635
1932	126,024	94,737	65,046	50,568	501,832	232,782	31,626
1933	135,061	111,088	60,560	51,895	370,849	182,833	32,924
1934	132,276	113,407	60,231	51,895	376,510	185,788	33,200
1935	135,468	112,833	59,678	51,412	380,601	184,438	32,814

The Land Tax assessed in the Commonwealth annually to the 30th June, 1936 was as follows:—£2,968,743 for 1929-30, £3,116,253 for 1930-31, £2,473,641 for 1931-32, £1,529,438 for 1932-33, £1,117,327 for 1933-34, £1,131,977 for 1934-35, and £1,145,381 for 1935-36. Assessments of land

should be made in respect of valuations made at the end of every third year. Values for the second and third years of a triennial period may be reduced but not increased. The first triennial valuation date was the 30th June, 1927, which was the basis of the assessments for 1927-28, 1928-29, and 1929-30. Valuations as at 30th June, 1930, for the assessments of the ensuing three years were greatly modified as a result of landholders' appeals in view of the heavy decline in values of rural products, and the effect of the general depression on land values.

The reduction in the amount of tax assessed for the year 1932-33 was attributable to the operation of the Financial Relief Act of 1932, which provided for a reduction of one-third of the tax assessed after the reduction of 10 per cent., which operated for 1927-28 and subsequent years.

#### *Commonwealth Income Tax.*

In addition to the taxation of incomes by the State, the Commonwealth levies a tax which is payable by residents and absentees in respect of income derived from sources within Australia and Papua. The tax was first levied as a war measure in the year ended 30th June, 1916, and has since been levied annually with various amendments from time to time, particulars of which were shown on page 138 of the 1934-35 Year Book.

*Revision of Law.*—In 1936, following the report of The Royal Commission on Taxation (1932) and chiefly with a view to obtaining more uniform methods of taxation as between the Commonwealth and various States, the law was revised. The new Act applies to the taxation of incomes derived in 1935-1936 and subsequent years.

Incomes are assessed for taxation in the year following that in which they are derived, the returns for assessment being made up for the twelve months ended 30th June or such other date as is approved by the Commissioner. The tax is usually payable before the next succeeding 30th June.

Towards the end of 1923 arrangements were made between the Commonwealth and State Governments for the collection by the State Commissioners of Taxation of the income tax payable under Commonwealth law, thus obviating the necessity for taxpayers to supply separate returns, and leading to an amalgamation of the Federal and State Taxation Departments. This arrangement was entered into in all States except Western Australia, where the Commonwealth Taxation Office collects both Federal and State taxes. Originally the Commonwealth Government contributed 60 per cent. of the working expenses of the Taxation Office in New South Wales, but this was reduced to 50 per cent. on 1st April, 1925, and subsequently to 37.5 per cent., when the Department undertook the collection of (State) Unemployment Relief Tax, Special Income Tax and Wages Tax.

*Exemptions.*—The incomes exempt from Income Tax include the salary of the Governor-General and of the Governor of a State; the official salary of the representative in Australia of the government of another country; of a foreign consul, a trade commissioner of any part of the British Empire other than Australia, and of members of their staff temporarily resident in Australia (subject to certain conditions as to reciprocity); the remuneration paid to a person not a resident of Australia for expert advice to the Government or as a member of a Royal Commission; income derived by representatives of certain educational, scientific, religious and sporting associations visiting Australia; the revenue of a municipal corporation or other local governing body or public corporation; the income of religious, scientific, charitable or public educational institutions; of trade unions

or associations of employers; a society not carried on for the gain of individual members being a friendly society or one established for the encouragement of music, art, science, literature, or for the development of aviation, or of the agricultural, pastoral, manufacturing or industrial resources of Australia; incomes of provident and superannuation funds and trust funds for public charitable purposes, pensions paid under the Australian Soldiers' Repatriation Act, 1920-1934; income derived from a mining property in Australia or New Guinea worked for the purpose of obtaining gold or gold and copper if gold represents at least 40 per cent. of the output.

*Assessable Income.*—In addition to the items set out in the Act, which include certain capital profits, any receipt in the nature of income is assessable unless exempted under the Act.

A *resident* of Australia, in addition to being liable to tax upon income derived or deemed to be derived in Australia, is also liable upon income derived from all sources outside Australia, unless such income is liable to tax, or the goods from the sale of which the income is derived, is subject to royalty or export duty, in any country outside Australia.

A *non-resident* of Australia is assessable upon income derived or deemed to be derived in Australia.

*Taxable income* broadly speaking is gross income less expenses incurred in earning it and (except in respect of companies) less the concessional deductions and statutory exemption.

*Concessional deductions* allowed to resident taxpayers include £50 in respect of the spouse of the taxpayer, or in the case of a widower of a female relative having the care of the taxpayer's children under 16 years of age, provided such spouse or relative is wholly maintained and whose separate net income does not exceed £50; £50 for each child under the age of 16 years, medical expenses not exceeding £50 and funeral expenses not exceeding £20 for taxpayer, his spouse or children under 21 years; an amount not exceeding £100 in the aggregate as payments to superannuation funds, friendly societies, and life assurance premiums. Certain other deductions in the nature of concessional deductions are allowable, *e.g.*, State Income Tax, Federal and State Land Tax, non income-producing rates, calls paid on shares in a mining company or syndicate mining for gold silver, base metals, rare mineral or oil, or carrying on afforestation in Australia; gifts to the following public bodies, hospitals, benevolent institutions, authorities engaged in research into causes, prevention or cure of disease in human beings, animals or plants; universities, public memorials relating to the Great War; sums paid or set apart as pensions or retiring allowances for the personal benefit of employees who are or were employed in the taxpayer's business.

These deductions are allowable from income in the following order:—Personal exertion, property other than dividends, dividends.

*Statutory exemption* (other than companies) £250 less £1 for every £2 by which the income exceeds £250, is allowed from income in the following order:—Property other than dividends, dividends, personal exertion.

*Rate of Tax—Individuals.* The rate of tax payable on the taxable income is determined by the average taxable income in a period of not more than five years. Where income is derived from both personal exertion and property, the average rate of tax on each class of income is calculated on the total taxable income.

The rates on income from personal exertion are as follows :—

(a) On income not exceeding £6,900—

$$\frac{76\cdot5}{100} \times \left( 3d. + \frac{\text{Taxable Income}}{160} \right) \text{ pence in the } \pounds.$$

(b) On income exceeding £6,900—

First £6,900 @ 35·2856d.

Balance @ 68·85d.

On income from property the following rates apply :—

(a) On income not exceeding £500—

$$\frac{90}{100} \times \left( 3d. + \frac{\text{Taxable Income}}{100} \right) \text{ pence in the } \pounds.$$

(b) On income not exceeding £1,500—

$$\frac{90}{100} \times \left( 1d. + \frac{\text{Taxable Income} \times 14}{1,000} \right) \text{ pence in the } \pounds.$$

(c) On income not exceeding £3,700—

$$\frac{90}{100} \times \left( 4\frac{3}{4}d. + \frac{\text{Taxable Income} \times 23}{2,000} \right) \text{ pence in the } \pounds.$$

(d) On income exceeding £3,700—

First £3,700 @ 42·57d.

Balance @ 81d.

*Minimum Tax.*—The minimum amount of tax is 1s.

*Companies Tax* is levied on the net income of a company. A co-operative, company is allowed a deduction of the amount distributed among its shareholders as rebates or bonuses based on business done by shareholders with the company also the amount of interest on dividends or shares distributed to shareholders. A life assurance company is allowed a deduction equal to 4 per cent. of a part of the calculated liabilities. Dividends paid by companies are assessable in the hands of the shareholder. A rebate of tax is allowed of the lesser amount of (a) the tax on the dividends calculated at the rate payable by companies for the year of tax, and (b) the rate of tax payable by the shareholder on income from property.

*Companies.*—The rate of tax payable is 1s. in the £. A company, in respect of debentures used in Australia or money lodged at interest with the company in Australia, shall, on all interest, paid or credited to a non-resident company, and on the amount in excess of £250 paid or credited to a non-resident individual, pay tax at the rate of 1s. in the £.

Particulars of the number and amount of taxable incomes according to grade are shown in the annual reports of the Federal Commissioner of Taxation, the latest report showing details of the assessments of the year 1934-35 on income for the year 1933-34.

#### *Commonwealth Estate Duties.*

The Estates Duty Assessment Act, which came into operation on 21st December, 1914, provided for the imposition of a duty on properties of persons who died after the commencement of the Act. The rate of tax is 1 per cent. of the value of the estate where the total value exceeds £1,000, but does not exceed £2,000, and an additional one-fifth per cent. for every thousand pounds, or part thereof, in excess of £2,000, the maximum being 15 per cent. of the value of the estate. These rates of tax have remained unchanged since the inception of the Act.

A reduction to two-thirds of the above rates is allowed if the estate is left to the widow, children, or grandchildren of the testator.

#### *Commonwealth Entertainments Tax.*

This Entertainments Tax was levied on payments for admission to almost every class of amusement. As from 15th October, 1925, the rates of tax were two pence halfpenny when the payment for admission was two shillings and sixpence, and, if it exceeded that amount, one-halfpenny for every sixpence or part of sixpence in excess thereof. The tax was abolished as from 27th October, 1933.

#### *Primage Duty.*

Since 10th July, 1930, primage duties have been imposed for revenue purposes. As from the date mentioned a duty of  $2\frac{1}{2}$  per cent. ad valorem was imposed on practically all imports, and subsequently increased to 4 per cent. as from 6th November, 1930. On 11th July, 1931, the rate of primage was raised to 10 per cent. on most goods. On 5th October, 1933, revised rates of duty, viz., 10, 5 and 4 per cent., came into operation, many classes of goods being exempt, including tea, hessian, jute piece goods, certain books and printed matter, spraying materials, bags, sacks, packs and bales, bullion and specie, cream separators and parts, linseed, rock phosphates, and sulphur. Certain goods when admissible under the British Preferential Tariff are also exempt, including machines, machine tools and appliances, materials and minor articles of a class or kind not commercially produced or manufactured in Australia or in the United Kingdom, goods for use in development of Australian industry or resources or for use in public hospitals or public educational institutions, aeroplanes, etc., and fuel oil and coal for use in Australian waters. If not included under the Preferential Tariff the goods named are charged 4 per cent.

The principal classes of goods subject to 4 per cent. primage, irrespective of origin, include infants' and invalids' foods, printing paper, certain surgical, dental and veterinary instruments, power kerosene, explosives and materials used in the manufacture thereof. Where the British Preferential Tariff applies, the following are subject to the 4 per cent. primages, hoop iron, blasting materials and knitting machines.

Goods, the produce or manufacture of Papua and New Guinea, were exempted by proclamation dated 25th September, 1935.

Goods subject to 5 and 10 per cent. primage cover a wide range, but the 5 per cent. rate applies in most cases to goods admissible at the British Preferential rates, and also, irrespective of origin, to the following classes, amongst others, drugs and chemicals, cotton and artificial silk yarns, iron and steel boiler tubes, jute fibre, celluloid sheets, raw hides and skins, copra, molasses, crude drugs and fire brigade and life-saving appliances.

Goods from New Zealand are exempt from primage duty under the Customs Tariff (New Zealand Preference) Agreement Act, 1933.

Goods, the produce or manufacture of Fiji, were exempted as from the 14th December, 1934. Under the Norfolk Island Act, 1913, goods the produce or manufacture of Norfolk Island are exempt.

#### *Sales Tax.*

As from 1st August, 1930, a sales tax at the rate of  $2\frac{1}{2}$  per cent. of sale value was imposed upon most locally-manufactured goods and imported goods. The Act requires all manufacturers and wholesale merchants to register. Securities may be demanded in any case where it is considered that such are necessary for the protection of the revenue, or where default is discovered or appears likely to occur. A certificate of registration is issued to each person who effects registration and, by means of this certificate, a

manufacturer is able to obtain the raw materials for his products free of tax. Wholesale merchants also are able to obtain their trading stocks free of tax by quotation of certificate of registration. The tax is paid monthly by the manufacturer or wholesale merchant who sells taxable goods to an unregistered person or to a registered person who does not quote his certificate. The amount of tax must be shown separately on invoices and not included in the price of the goods. Manufacturers with a small turnover, whose tax amounts to a few shillings only per month, may be exempted from payment of tax.

The general exemptions included primary products produced in Australia, goods for export, goods sold to a Government or Government authority, and goods subject to special customs revenue duties, e.g., petrol, tobacco, cigarettes, cigars, films, newsprint, and wireless valves. Typical examples of exemptions were:—Bacon and hams, bags and sacks used in marketing primary products, bread, boxes, etc., to be used in marketing exempt goods of Australian production, electricity, gas, fertilisers, metals as recovered from ores, meat, milk products, newspapers, and water supplied by local authorities.

As from 11th June, 1931, the rate of tax was *increased from 2½ per cent. to 6 per cent.*, and certain additional exemptions were granted.

In September, 1932, further exemptions were made, principally in respect of articles used as aids to primary production.

On the 26th October, 1933, the rate of tax was *reduced to 5 per cent.*, further articles were exempted, the principal being meat and meat products (whether or not marketed in containers); prescribed infants' and invalids' foods; prepared breakfast foods, consisting of processed grain; rice, barley, sago and tapioca; drugs and medicines (certain items excepted) used in the prevention of sickness in human beings, prescribed surgical, dental and veterinary instruments, appliances and materials; certain articles used in fruit-growing, bee-keeping, fishing, poultry-farming and mining; and building materials, such as bricks (Australian), cement, timber, tiles and slates for roofing.

From 1st April, 1934, additional articles were exempted, including imported aeroplanes, building materials such as various classes of bricks and blocks, wall and flooring tiles, timber and joinery, lime, plaster and products having similar structural uses in buildings.

Further exemptions were made as from 1st August, 1934, including aeroplanes and parts thereof, certain engines and machinery for use in fishing and pearling, plaster and plaster products, several kinds of agricultural and similar machinery, explosives for use in farming and pastoral pursuits, imported bricks, and other burnt-clay brick products. Certain goods imported from Fiji, if not produced in Australia, were exempted during 1934.

Many additional exemptions were gazetted as from 25th October, 1935, including printing machinery, live stock and poultry for breeding purposes, and ambulances for use in hospitals.

Each year, from 1932 onwards, the exemptions became so numerous that in 1935 it was considered necessary to consolidate and to classify them in broad industrial divisions. For this purpose the *Sales Tax Exemptions Act, 1935*, was passed, providing a single schedule of all exemptions.

The rate of tax was *reduced from 5 to 4 per cent.* on and from 11th September, 1936.

The tax collected upon sales in New South Wales in the eleven months ended 30th June, 1931, amounted to £1,314,291. In the year 1931-32 the amount was £3,181,033; in 1932-33, £3,526,876; in 1933-34, £3,323,340; in 1934-35, £3,291,436; and in 1935-36, £3,594,003.

*Flour Tax.*

A flour tax was imposed as from the 4th December, 1933, and was terminated by proclamation as from 31st May, 1934. The tax covered all flour sold, delivered or imported during the period of the tax. Stocks in hands of persons other than millers on 4th December, 1933, were also taxable to the extent that the stocks exceeded 1,000 lb. in weight. The rate was £4 5s. per short ton of flour. The tax was revived for one year as from 7th January, 1935, at a rate of £2 12s. 6d. per short ton. By an amendment to the Act termination by proclamation was substituted for the fixed period of operation. The tax was terminated by proclamation as from 24th February, 1936. New South Wales collections amounted to £532,538 for the year 1933-34, to £311,991 for 1934-35, and to £450,785 for 1935-36.

*Wool Tax.*

A wool tax was imposed in May, 1936. It provides for a levy on all wool grown in Australia and shorn on or after the 1st July, 1936. Dead wool, skin wool and imported wool do not come within the scope of the tax. The rates are prescribed by regulations on the recommendation of the Australian Wool Board. The rates will not exceed 6d. per bale, 3d. per fadge or butt and 1d. per bag. These rates are in force for 1936-37 and the tax amounted to £72,805 from the year's clip. The receipts by way of tax are paid into a "Wool Publicity and Research Fund" administered by the Wool Board, which consists of one Government nominee and six nominees of the Australian Wool Council, at the request of which the tax was imposed for the purpose of improving the production and extending the use of wool throughout the world.

## STATE FINANCE.

For many years prior to 1928-9 the State Accounts were kept on a cash basis, and the statements of revenue and expenditure included only the moneys actually deposited in or paid out of the Treasury during the year. A change of method was introduced as from 1st July, 1928, with the object of placing the accounts as far as practicable upon the income and expenditure basis, by crediting income to the accounts of the period in which it is earned or accrued and debiting the expenditure to the year in which it is incurred. In effect, however (but subject to qualifications as to some variations of dates for closing accounts of receipts and expenditure at the end of certain years), the Consolidated Revenue Account remains a statement of receipts and payments in the twelve months ended 30th June, so far as the Sydney accounts are concerned, and the twelve months ended 30th April so far as the London account is concerned. From time to time the accounts of the principal business undertakings have been separated from consolidated revenue and placed on an income and expenditure basis. Special funds have been created in respect of such matters as motor taxation and unemployment relief. As from 1st July, 1928, the Public Works Fund was replaced by the Special Purposes (Revenue) Fund, and the relationship of this account with Consolidated Revenue Account was completely altered. As from 1st July, 1931, reversion was made to a system practically the same as that in operation prior to 1st July, 1928. In some cases, however, the earnings of Departments were deducted from expenditure and treated as repayments to credit of votes, and the net amounts taken to account. In others, the earnings were taken in as revenue receipts. By reason of these and other changes, of which details are shown in later pages, it is difficult to make comparisons as between the accounts of recent years.

The principal accounts of the State Government in operation during 1931-32 related to the Consolidated Revenue Fund, the Closer Settlement Fund, the Special Deposits, the General Loan Fund, Unemployment Relief Fund, Family Endowment Fund, a State Lottery Fund, and various road and transport funds. There were also the accounts of the State business undertakings. As from the 1st July, 1932, the receipts from Unemployment Relief Tax, Family Endowment Tax, and the State Lotteries surpluses were paid into Consolidated Revenue Fund. The first-mentioned two funds were discontinued as from 1st December, 1933, and 1st January, 1934, respectively, and three business undertakings were sold to private buyers early in 1936.

The *Consolidated Revenue Fund* was created by the Constitution Act. All taxes and territorial and other revenues of the Crown are paid to this fund, unless it is prescribed by statute that they are to be paid into some other fund. Subject to certain charges fixed by the Constitution Act, the fund may be appropriated by Parliament for expenditure on specific purposes, as prescribed by statute. Parliamentary appropriations may be either special or annual. A special appropriation is one which is contained in an Act which itself gives authority for the expenditure incurred on the object or function to which it relates. Annual appropriations are made each year to meet expenses of government not covered by special appropriations and not provided for by payments from special funds. Annual appropriations or balances of consolidated revenue are not available for expenditure after the end of the year for which they were voted.

Prior to 30th June, 1924, the Consolidated Revenue Account embraced practically the whole of the receipts and expenditure on revenue account of the State Government and of the statutory bodies appointed by it, inclusive of those in connection with railways, tramways, water and sewerage works, harbours and navigation works, housing, and the Government grain elevators, but exclusive of certain industrial undertakings, and of the Metropolitan Meat Industry Board.

As from 1st April, 1925, the accounts of the Metropolitan Water, Sewerage and Drainage Board were separated from the Consolidated Revenue Fund, and from 1st July, 1924, the whole or part of the revenue obtained from taxation of motor vehicles and from licenses therefor has been credited to the funds of the Main Roads Board, which came into being after that date, or to funds created in terms of the Transport Act, 1930.

As from 1st July, 1928, the accounts of the railways and tramways, the Sydney Harbour Trust, and the Hunter District Water and Sewerage Board were removed from the Consolidated Revenue Account, and the Special Purposes (Revenue) Fund was constituted within the Consolidated Revenue Fund upon the abolition of the Public Works Fund, of which particulars are shown in the 1928-29 issue of the Year Book at page 148. The Special Purposes (Revenue) Fund was abolished as from 1st July 1931. Its scope was outlined on page 650 of the 1930-31 Year Book.

The *Closer Settlement Fund* relates to moneys used for the promotion of land settlement. Particulars of the fund are shown on page .

The *Special Deposits Account* is an account in the Treasury books for recording transactions on a number of accounts relating to sums held by or deposited with the Treasurer for store accounts, advance accounts, and moneys (not included in the consolidated revenue, general loan, or trust accounts) which the Treasurer directs to be carried to the Special Deposits Account. The funds in this account are not subject to annual appropriations by Parliament, and balances may be expended at any time subject to certain regulations and the issue of warrants.

The *General Loan Account* relates to the moneys which the Government has borrowed by the issue of stock, Treasury bills, and debentures under the authority of a Loan Act. To the account are credited the net proceeds of loans raised for works, services and redemptions. Expenditure under those heads is debited to the account in the year in which it is voted by Parliament. There is also a Loans Expenditure Suspense Account, to which are debited amounts expended on works and services which it is proposed to debit to General Loan Account, and which are voted by Parliament in the year after they are expended and debited to General Loan Account in that year.

All expenditure from loan moneys must be authorised under an Appropriation Act, in the same manner as the ordinary expenditure chargeable to the general revenue. There is a restriction on the expenditure, whether from loans or from revenue, in the provisions of the Public Works Act. Under that Act the question of constructing all works estimated to cost more than £20,000, except those connected with the maintenance of railways, is referred by resolution of the Legislative Assembly to a Parliamentary Standing Committee elected by the members of each Parliament. The Committee investigates and reports to Parliament, and the Assembly decides whether it is expedient to carry out the proposed work. If the decision be favourable, a bill based thereon must be passed before the authorisation is absolute. At the close of a financial year unapplied appropriations and balances of appropriations made by a Loan Act passed two years or longer lapse, except for the payment of claims in respect of any outstanding contract or work in progress.

#### Revenue Accounts.

The following table shows the receipts and expenditure of the principal revenue accounts combined during the eleven years ended 30th June, 1936, that is, the period since the exclusion of the accounts of the Metropolitan Water and Sewerage Board from consolidated revenue.

Year ended 30th June.	Receipts.		Expenditure.	
	Governmental.	Principal Business Undertakings. *†	Governmental.	Principal Business Undertakings. *†
	£	£	£	£
1926	16,306,574	22,233,457	16,643,687	23,170,648
1927	19,832,448	24,310,118	17,807,260	24,883,374
1928	19,944,191	25,267,539	20,032,803	26,138,730
1929	20,756,538	26,284,015	21,764,110	27,201,503
1930	21,637,516	23,859,727	22,566,899	26,989,364
1931	22,380,904	20,220,361	26,011,821	25,278,660
1932	21,839,563†	20,211,022	31,024,241‡	25,254,188
1933	25,097,739	20,675,109	25,459,529	24,072,158
1934	21,857,185	20,286,671	22,701,820	22,812,999
1935	21,439,522	21,682,201	22,685,307	22,744,137
1936	23,174,539	22,848,899	24,592,625	23,231,740

\*Omitting Metropolitan Water, Sewerage and Drainage Board.

† Including interest chargeable on loan capital.

‡ Receipts exclude certain revenue, collection of which was delayed until 1932-33, and expenditure includes certain interest payments delayed from 1930-31.

Under "Governmental" are grouped the accounts of the various Government Departments, including lands, mines, and forestry revenue and administration, services rendered, revenue and working expenses of the ports other

than Sydney, of the Government grain elevators, and amounts of interest paid and received other than from business undertakings. These accounts are on a cash basis and, since 1st July, 1928, have been designated Consolidated Revenue Fund in the Treasurer's accounts.

The expenditure shown above under "Governmental" for 1930-31 is exclusive of a sum of £1,544,750 due for payment to the Commonwealth Government in respect of oversea interest, and not paid until after 30th June, 1931.

Under the heading "Principal Business Undertakings" are included the New South Wales Government Railways, Tramways, and Omnibuses, the Sydney Harbour and the Hunter District Board of Water and Sewerage. Since 1st July, 1928, the accounts of these undertakings have been on an income and expenditure basis. In tables published in this Year Book for 1923-24 and previous years, totals for the Metropolitan Water, Sewerage and Drainage Board were also included under this heading, but as from 1st April, 1925, the Board was placed in an autonomous financial position. Its accounts have therefore been excluded from the foregoing table.

An annual contribution of £800,000 from Consolidated Revenue Fund towards losses on non-paying railways is duplicated in the above statement in 1928-29 and in subsequent years, being included as receipts and expenditure under both "Governmental" and "Business Undertakings" headings. Furthermore, sundry alterations as to methods of allocation of receipts and payments as between the Consolidated Revenue Fund and the Main Roads Fund, the Public Works Fund (Special Revenue Fund), the Unemployment Relief Fund, and others, have affected the comparability of the foregoing figures. For these reasons the table is of very limited use, and does not present a complete summary of the annual finances of the State. For purposes of comparison the receipts and expenditure of the Unemployment Relief Fund and the Family Endowment Fund are included throughout as they were included in Consolidated Revenue Fund from 1st July, 1932, until the dates of their abolition, mentioned elsewhere.

The following table shows the debit and credit balances of the respective sections of the Revenue Accounts shown in the previous table:—

Year ended 30th June.	Surplus (+) or Deficiency (—).		
	Governmental.	Principal Business Undertakings.†	Total for Year.
	£	£	£
1926	(—) 337,113	(—) 937,191	(—) 1,274,304
1927	(+) 2,032,188	(—) 573,256	(+) 1,458,932
1928	(—) 88,612	(—) 871,191	(—) 959,803
1929	(—) 1,007,572	(—) 917,488	(—) 1,925,060
1930	(—) 929,383	(—) 3,129,637	(—) 4,059,020
1931	(—) 3,630,917	(—) 5,058,239	(—) 8,689,156
1932	(—) 9,184,678	(—) 5,043,166	(—) 14,227,844
1933	(—) 361,790	(—) 3,397,049	(—) 3,758,839
1934	(—) 844,635	(—) 2,526,328	(—) 3,370,963
1935	(—) 1,245,785	(—) 1,061,936	(—) 2,307,721
1936	(—) 1,418,086	(—) 382,841	(—) 1,800,927

\* Omitting Metropolitan Water, Sewerage, and Drainage Board.  
† After payment of interest chargeable on loan capital.

The amounts of the two deficits combined, as shown above, as at 30th June in each of the past six years, do not represent the aggregate position for reasons stated above, and they may need modification when all accounts

are presented on a uniform cash basis. In addition to the deficit of £3,630,917 on governmental account as at 30th June, 1931, there was outstanding an amount of £1,544,750 for oversea interest due but not paid to the Commonwealth Government until August, 1931.

Since 1st July, 1928, "Governmental" receipts and expenditure include some items not previously taken into account and exclude others.

A summary of the items of Governmental revenue and expenditure is shown below for the past three years:—

Classification.	Amount.			Per Head of Population.		
	1933-34.	1934-35.	1935-36.	1933-34.	1934-35.	1935-36.
<b>Revenue.</b>	£	£	£	£ s. d.	£ s. d.	£ s. d.
Contribution by Commonwealth towards Interest...	2,917,411	2,917,411	2,917,411	1 2 4	1 2 2½	1 2 0
State Taxation ... ..	12,428,104	12,056,106	14,125,654	4 15 1	4 11 6	5 6 4
Land Revenue ... ..	1,598,086	1,599,000	1,699,549	0 12 3	0 12 1	0 12 9
Receipts for Services Rendered ... ..	1,193,548	1,389,588	1,479,753	0 9 2	0 10 7	0 11 2
General Miscellaneous ... ..	3,720,036	3,477,417	2,952,172	1 8 5	1 6 5	1 2 3
<b>Total Revenue ...</b>	<b>21,857,185</b>	<b>21,439,522</b>	<b>23,174,539</b>	<b>8 7 3</b>	<b>8 2 9</b>	<b>8 14 6</b>
<b>Expenditure.</b>						
Legislative and General Administration ... ..	6,553,798	7,236,229	7,872,216	2 12 5	2 15 0	2 19 3
Maintenance of Law, Order and Public Safety ... ..	2,281,755	2,334,710	2,485,561	0 17 6	0 17 9	0 18 9
Regulation of Trade and Industry ... ..	92,890	85,254	86,453	0 0 8	0 0 8	0 0 8
Education ... ..	3,676,604	3,921,591	4,199,828	1 8 2	1 9 9	1 11 7
Encouragement of Science, Art and Research... ..	55,216	55,532	59,573	0 0 5	0 0 5	0 0 6
Promotion of Public Health and Recreation ... ..	1,746,200	1,719,636	1,849,689	0 13 4	0 13 1	0 13 11
Social Amelioration... ..	5,399,473	4,593,528	5,243,290	2 1 4	1 14 10	1 19 6
War Obligations ... ..	68,369	87,113	70,583	0 0 6	0 0 8	0 0 6
Development and Maintenance of State Resources... ..	2,282,185	2,384,130	2,459,867	0 17 6	0 18 1	0 18 6
Local Government ... ..	245,330	267,784	265,865	0 1 11	0 2 0	0 2 0
<b>Total Expenditure</b>	<b>22,701,820</b>	<b>22,685,307</b>	<b>24,592,625</b>	<b>8 13 9</b>	<b>8 12 3</b>	<b>9 5 2</b>

Particulars of the total taxation imposed are shown on a comparative basis in the table on page 44, where the figures include also motor taxes and license fees, which are paid to the other funds after the deductions to cover the cost of collection and administration, viz., £231,758 in 1932-33, £217,766 in 1933-34, £272,497 in 1934-35 and £231,984 in 1935-36. The amounts so deducted were credited to the Consolidated Revenue Fund, partly as an offset against the expenditure of the Police Department and partly under the category of receipts for services rendered. An annual contribution of £2,917,411 is made by the Commonwealth to the State in terms of the financial agreement between the Commonwealth and the States, of which details are shown on a later page.

#### *Land, Forestry, and Mining Revenue of the State.*

At the establishment of responsible government in New South Wales in 1856, the control of lands was vested exclusively in the State Parliament. At that date only 7,000,000 acres had been alienated, and approximately 191,000,000 acres of land were owned by the Crown. Nearly all these lands have been made available for settlement, approximately 46,205,000 acres having been absolutely alienated, 22,138,000 acres being in course of sale on terms, and 106,261,000 acres being occupied by landholders at rental under various leasehold tenures. About 23,430,000 acres are unoccupied, including 16,530,000 acres of reservations, roads and beds of lakes and rivers. About 4,104,000 acres were available for settlement on 30th June, 1936.

Over a considerable proportion of the whole area the State has reserved to itself mineral rights, which produce a substantial income from royalties. In addition, there are approximately 6,600,000 acres of State forests and timber reserves and land within irrigation areas returning revenue to the Government.

The receipts from lands, mineral resources, and forests credited to Consolidated Revenue Fund during the last five years are shown below:—

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
Revenue from Sales ... ..	893,084	896,514	796,344	805,063	835,170
Rentals for Leases, Fees and other Receipts	636,266	631,991	578,111	532,597	551,260
Royalties on Minerals, Rents for Mining Leases, etc. ....	137,418	134,634	144,951	168,939	214,795
Forestry—Royalties, Rentals, etc.	48,192	63,808	78,680	92,396	98,324
Total, Land Revenue ...	1,714,960	1,726,947	1,598,086	1,599,000	1,699,549

The interest on deferred sales and rentals for leases of land are classified as revenue.

Royalties on minerals and one-half of the royalties from timber and other forestry receipts are payable to Consolidated Revenue Fund. The balance of the forestry receipts are not included in the accounts of the Consolidated Revenue Fund, but are paid to a special fund and set apart for afforestation, the amounts so credited being £41,466 in 1931-32, £55,307 in 1932-33, £70,867 in 1933-34, £84,454 in 1934-35, and £91,538 in 1935-36.

Royalties on minerals, which constitute the principal item of mining revenue, are subject to fluctuation, royalty being assessed in some cases on the profits of the mining companies and in other cases on the quantity of minerals produced. The bulk of the receipts from this source are paid in respect of coal-mining.

#### *Receipts for Services Rendered.*

The receipts for services rendered which are credited to Consolidated Revenue consist largely of "collections in aid" or income which is applied as an earning in reduction of expenditure. The principal items are shown below:—

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36
	£	£	£	£	£
Harbour Rates and Fees, Pilotage, etc. ...	215,241	249,097	252,009	291,115	304,979
Fees—					
Registrar-General ... ..	93,603	104,686	122,474	138,918	157,458
Law Courts ... ..	180,819	188,430	188,842	182,386	191,210
Valuation of Land ... ..	40,866	43,373	47,600	25,015	61,820
Grain Elevators—Handling Fees, etc. ....	274,321	371,908	192,829	353,114	356,893
Charge for Collection of Motor Taxes ...	57,025†	56,273†	62,734†	69,077†	37,197†
Maintenance of Inmates of Public Institutions	55,582	59,988	59,538	35,154	28,840
Maintenance of Patients in Mental Hospitals	92,282	104,386	98,127	85,628	101,650
Other ... ..	166,367	166,493	169,595	195,181	239,706
Total... ..	1,176,106†	1,346,645†	1,193,548†	1,389,588†	1,479,753†

† In addition, sums of £170,486 in 1931-32, £173,485 in 1932-33, £155,082 in 1933-34, £203,420 in 1934-1935, and £194,787 in 1935-36 were credited to consolidated revenue from motor taxation as a recoup to Police Department for supervision of road traffic.

Amounts included above as contributions for the principal services rendered to the Commonwealth Government in 1935-36 were:—Maintenance of old-age and invalid pensioners in State institutions £34,211; contribution for services of magistrates, £1,049; and other, £1,470.

*General Miscellaneous Receipts.*

All items not placed under headings already shown are included in the general miscellaneous group, a substantial part of the total amount being interest collections:—

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Interest Collections—	£	£	£	£	£
Metropolitan Water, Sewerage, and Drainage Board Advances ... ..	179,073	308,370	501,092	202,296	291,237
Country Towns Water Supply and Sewerage Works ... ..	214,682	226,142	171,975	147,400	161,489
Trust Works under Water Act, 1912 ... ..	10,001	8,966	9,132	8,118	8,096
Sydney Harbour Bridge Loan Expenditure ... ..	11,916	.....	.....	.....	.....
Daily Credit Balances with Banks ... ..	10,233	14,127	4,143	7,145	5,963
Advances to Necessitous Farmers ... ..	70,157	68,483	14,681	16,036	21,060
Advances for Wire-netting ... ..	12,005	10,754	12,867	12,755	14,655
Other Interest ... ..	169,332	96,622	135,880	159,997	187,796
Rents of Buildings, Wharves, etc. ... ..	39,139	37,330	36,547	32,087	35,017
Fines and Forfeitures ... ..	52,068	49,185	53,097	64,091	86,189
Darling Harbour Resumed Area ... ..	47,423	40,194	38,678	39,829	41,525
Sale of products of Experiment Farms, Institutions, etc. ... ..	118,019	121,211	128,978	122,655	122,926
Repayment—Balances not required ... ..	7,449	8,953	16,768	44,201	44,440
Repayments to Credit of Votes, previous years ... ..	716,760	525,219	867,047	705,047	613,342
State Lotteries ... ..	758,146	814,602	696,475	676,600	736,300
State Superannuation Board—Repayment of part Employers' contributions and Interest thereon ... ..	.....	.....	328,728	328,728	328,728
Liquor Compensation Fund—Part balance not required ... ..	.....	.....	250,000	.....	.....
Government Insurance Office—Part balance not required ... ..	.....	.....	300,000	.....	.....
Main Roads Board—Transfer of part balances at credit of County Cumberland & Country Main Roads Funds as at 30th June, 1932 ... ..	.....	.....	.....	.....	.....
Commonwealth Government—State's share of Special grants ... ..	.....	200,000	.....	786,000	205,000
Other Miscellaneous Receipts ... ..	133,979	131,817	153,953	124,431	138,409
Total... ..	2,550,382	2,661,975	3,720,036	3,477,416	2,952,172

The amounts of interest receipts shown in the foregoing table comprise only miscellaneous minor receipts and are exclusive of large sums received on outstanding balances of land sold on the instalment system, interest earned by business undertakings, etc. The interest shown as paid by the Metropolitan Water, Sewerage, and Drainage Board relates to portion only of its indebtedness.

Under the provisions of the Interest Reduction Act, 1931, interest rates on private debts were reduced as described on page 120. Rates on debts due to the Government were reduced to a similar extent by the Finances Adjustment Act, No. 27, 1932, as amended by Act No. 64 of 1932, the effect of which was to provide for a reduction of 22½ per cent. in all interest rates, establishing a maximum rate of 4 per cent. Relief was afforded thereby to public bodies, including municipal and shire councils, as from 1st January, 1933, and to the Metropolitan and Hunter District Water Boards as from 1st July, 1933. Interest on debts owing by necessitous farmers, on loans and advances to settlers, on land debts under the Closer Settlement and the Returned Soldiers' Settlement Acts was reduced to a maximum of 4 per cent. as from 1st January, 1933.

The miscellaneous receipts in 1930-31 and subsequent years include large sums for which corresponding entries were not made under the system of accounts previously in operation, *e.g.*, the proceeds of the sale of the produce of the Agricultural College, experiment farms and other State institutions.

*Expenditure from Revenue.*

The total expenditure from Consolidated Revenue Fund in 1935-36 amounted to £25,467,625, but this amount included Interest £875,000 borne by the fund on behalf of Railways. Of the net amount, £24,592,625, £7,505,867 was expended on salaries and payments in the nature of salaries.

A classification of the expenditure according to the functions of Government is shown on page 67. An analysis of expenditure according to departments is shown below:—

Department.	1934-35.	1935-36.	Department.	1934-35.	1935-36.
<b>Education—</b>	£	£	<b>Special Appropriations—</b>	£	£
General ... ..	3,819,241	4,106,275	Interest on portion of		
Child Welfare ... ..	205,451	210,531	Funded Debt ... ..	3,553,161	4,360,476
	4,024,692	4,316,806	Sinking Fund ... ..	815,311	1,077,000
<b>Chief Secretary—</b>			Repayments ... ..	*206,783	.....
Police ... ..	1,173,146	1,245,018	Widows' Pensions Act ...	532,416	558,431
Other ... ..	173,466	180,049	Other ... ..	987,369	1,107,769
Government Relief (part)	3,632,079	†		6,095,040	7,103,667
	4,978,631	1,425,067	<b>Executive and Legislative...</b>	37,543	37,154
<b>Social Services—</b>	.....	4,237,170	Attorney-General and Justice ... ..	666,014	698,432
<b>Treasury—</b>			Public Works ... ..	456,325	655,717
Interest ... ..	610,837	278,511	Agriculture ... ..	506,604	517,749
Exchange ... ..	787,741	791,589	Lands ... ..	347,269	333,664
Contribution to Railways	800,000	800,000	Local Government—		
Coal Settlement Agreement	46,455	40,523	Subsidies, etc. ... ..	199,043	191,442
State Lotteries ... ..	53,977	54,221	Other ... ..	72,313	64,164
Subventions to Friendly Societies ... ..	56,959	73,713	Premier ... ..	252,234	109,225
Other ... ..	813,987	760,228	Labour and Industry ...	46,341	54,915
	3,169,956	2,798,785	Water Conservation ...	74,265	82,701
<b>Public Health—</b>			Mines ... ..	71,398	76,210
Hospital Fund ... ..	605,331	656,103	Forests ... ..	49,690	55,398
Care of Sick, Aged, etc. ...	335,974	353,481	Ministry of Transport ...	4,092	72,844
Mental Hospitals ... ..	551,591	597,515	Schedule—Judges' Pensions, etc....		
Other ... ..	108,809	117,237		32,152	37,189
	1,601,705	1,724,336		2,815,283	2,986,794
			<b>Grand Total ...</b>	£ 22,685,307	24,592,625

\* Tramways, previous years.

† See Social Services, separate Department.

An analysis of payments from Consolidated Revenue according to objects of expenditure in the years ended 30th June, 1933, 1934 and 1935 is as follows:—

Head of Expenditure.	1933-34.	1934-35.	1935-36.
	£	£	£
<b>Salaries and Payments in Nature of Salaries...</b>	6,751,999	7,142,286	7,505,867
<b>Other Services ... ..</b>	11,690,393	11,910,942	12,849,588
<b>Social Services (part) and Govt. Relief (part)...</b>	4,259,428	3,632,079	4,237,170
<b>Total ...</b>	£ 22,701,820	22,685,307	24,592,625

The amounts of £3,632,079 in 1934-35 and £4,237,170 in 1935-36 shown as expenditure from Consolidated Revenue on Government Relief and Social Services, respectively, represent portion only of the expenditure on Unemployment Relief, Family Endowment and on other Relief, the balance being included under other headings in the table. The total expenditure from Consolidated Revenue Fund on social amelioration during 1934-35 was £4,593,328, but there was also an expenditure of £4,629,236 on Unemployment Relief from loan money through the Special Deposits Account. During 1935-36 the respective amounts similarly expended were £4,243,290 and £3,391,065.

## CLOSER SETTLEMENT ACCOUNT.

The Closer Settlement Fund was established under Act No. 9 of 1906. Under an amending Act which operated as from 1st July, 1928, this fund was closed and its liabilities were transferred to a new Closer Settlement Fund, incorporating the Returned Soldier Settlement Accounts. A liability of £3,544,005, being the net loan expenditure as at 30th June, 1928, in respect of the settlement of returned soldiers was transferred to the new fund. The fund is maintained as a separate account, and its transactions are not included in the Consolidated Revenue Fund.

The working capital of the fund is derived from loan moneys made available by the State, Parliamentary appropriations from the Consolidated Revenue Fund, insurance fees paid in respect of property under the Real Property Act, and capital and interest repaid by settlers. The expenditure from the fund consists mainly of the purchase price of estates, the cost of subdivisions and improvements, advances to returned soldiers, interest and sinking fund charges on loan moneys, sums paid in respect of assurance claims under the Real Property Act, amounts for the redemption of closer settlement debentures issued in lieu of cash payments for estates, and premiums for fire insurance in respect of improvements. The fund is charged also with costs of administration.

The total receipts and expenditure of the Closer Settlement Fund from its inception to 30th June, 1928, were summarised on page 148 of the Official Year Book for 1928-29. A summary for the eight years ended 30th June, 1936, is as follows:—

Receipts.	Amount.	Expenditure.	Amount.
	£		£
Credit Balance at 30th June, 1928 ...	48,599	Purchase of Estates and Contingent Expenses ...	684,55
Transfer from General Loan Account of amount voted for Redemption of Debentures ...	1,256,300	Advances to Returned Soldiers ...	96,578
Repayments of Principal and Interest on account of—		Subdivision of Lands for Returned Soldiers ...	183,037
Estates acquired ...	4,067,895	Fire Insurance Premiums ...	24,709
Improvement Leases resumed, etc. ...	125,441	Interest on—	
Advances to Soldiers (including interest) ...	754,824	Loans—Recoup to Consolidated Revenue ...	4,341,781
Fire Insurance premiums ...	23,908	Closer Settlement Debentures ...	278,558
Fees under Real Property Act ...	140,810	Contribution to Sinking Fund ...	342,025
Various Repayments ...	5,753	Redemption of Debentures and Stock ...	1,263,800
Proceeds, sale of Stock and Bonds ...	185,270	Other ...	3,303
Debit Balance at 30th June, 1936 ...	646,656	Exchange on Remittances ...	37,128
Total ...	£ 7,255,462	Total ...	£ 7,255,462

The debit balance at the 30th June, 1936, was £646,656, as against £812,342 at the end of June, 1935, an improvement of £165,986.

The aggregate balance-sheet of the Closer Settlement Fund is not available. The loan liability of the fund as at 30th June, 1936, was £12,458,025, comprising £12,326,325 Australian Consolidated Stock and £131,700 Closer Settlement Debentures. Portion of the State indebtedness to the Commonwealth in respect of soldier settlement was written off as from 30th June, 1927, under the provisions of the Financial Agreement (Returned Soldiers Settlement) Act No. 1, 1935, an amount of £748,918 being apportioned in reduction as from 1st July, 1935, of the loan indebtedness of the Closer Settlement Fund to the General Loan Account. At the 30th June, 1936, instalments of principal outstanding amounted to £254,626, as against £315,773 in June, 1935, outstanding interest instalments totalled £492,731 as against £495,496 and the outstanding balance of purchase money was £11,814,804 compared with £11,154,247 at 30th June, 1935. Included in these outstanding balances at 30th June, 1936, are amounts of £1,066,046 for principal and £104,029 for interest in respect of Soldier Settlers' accounts, &c. Prior to 1st July, 1932, the fund had been charged

with interest on loan liability at the rates applicable to the various loans from which the capital of the fund had been provided, with exchange in addition. As from that date the rate was fixed at  $4\frac{1}{2}$  per cent., free of any payment of exchange. From 1st January, 1933, the rate was reduced to  $3\frac{1}{2}$  per cent., free of exchange payments. The interest charge in 1935-36 was £437,509 as compared with £467,775 in 1934-35. During the year 1933-34 interest in arrear, and interest which had previously been added to settlers' capital balances were postponed free of interest until the end of the term of purchase. At 30th June, 1936, the amount set aside by this postponement amounted to £1,928,194. Settlers under the Crown Lands Amendment Act, 1932, were granted waivers of interest in cases where holdings had been affected by floods, droughts, etc. Reductions of £2,083,400, or 17.3 per cent. in outstanding balances were made during 1933-34, 1934-35 and 1935-36 as a result of reappraisements of capital values in terms of the Crown Lands Amendment Act, 1931. At the 30th June, 1936, about 49 per cent. of the accounts current were paid up to date.

The amount of debentures issued was £97,300 during 1928-29, £34,400 during 1929-30, and none have been issued since. Redemptions amounted to £471,000 in 1928-29, £580,000 in 1929-30, £25,200 in 1930-31, and £500 in 1931-32. There were no redemptions during the next four years.

#### *Cash Balances.*

The Audit Act provides that the Treasurer may arrange with any bank for the transaction of the general banking business of the State. The accounts are kept under various headings, and all amounts paid into any of the accounts mentioned are deemed to be "public moneys," and for interest purposes the several accounts are treated as one. The special accounts, which consist of "Supreme Court Moneys," are not controlled by the Audit Act, as they are operated on directly by the officers in charge of the Departments concerned.

The cash balance on the 30th June in each of the last five years was distributed as follows:—

			1932.	1933.	1934.	1935.	1936.
			£	£	£	£	£
Sydney	...	...	Cr. 2,770,660	Cr. 2,419,315	Cr. 1,601,366	Cr. 2,606,410	Cr. 4,287,059
London	...	...	Cr. 2,010,577	Cr. 2,256,396	Cr. 1,920,697	Cr. 1,981,169	Cr. 2,010,668
Total	...	...	Cr. £4,781,237	Cr. £4,675,711	Cr. £3,522,063	Cr. £4,587,579	Cr. 6,297,727

In order to obtain a complete view of the cash position it is necessary to take into account the increase in recent years in the issue of short-term Treasury Bills and debentures to cover cash deficiencies. Particulars of these are shown on page 84.

#### ACCOUNTS OF STATE ENTERPRISES.

The principal State enterprises are those usually known as the business undertakings. The railways are under the management of the Railway Commissioners, the tramways and omnibuses under the Commissioner for Road Transport and Tramways. Sydney Harbour Works were under the control of the Sydney Harbour Trust, until the end of January, 1936. On the 1st February, 1936, the Maritime Services Board was constituted to take over the services previously controlled by the Sydney Harbour Trust, the Navigation Department, and other maritime services. The Metropolitan Water, Sewerage and Drainage works and the Hunter District Water Supply and Sewerage works are each administered by a board. The former

is not now considered a business undertaking, its accounts having been separated from Consolidated Revenue Fund as from 1st April, 1925. The accounts of the other concerns mentioned were placed on an income and expenditure basis and separated from the Consolidated Revenue Account as from 1st July, 1928. The finances of the Hunter District Water and Sewerage Works are transacted through a Special Deposits Account, and those of the other enterprises through separate funds. Further reference to these undertakings may be found in the chapters of this Year Book relating to "Railways and Tramways," "Shipping" as to Sydney Harbour works and "Local Government" as to water and sewerage works.

In addition to these business undertakings, there have been in recent years other utilities and enterprises whose accounts, with a few exceptions, have been kept on a quasi-commercial basis, separated from the Consolidated Revenue Fund, and whose receipts and expenditure have passed through the Special Deposits Account of the Treasury. Five of these were classed as industrial undertakings, viz.: the State Metal Quarries, the State Brickworks, the Monier Pipe Works, the Building Construction Branch, and the Government Tourist Bureau and Resorts. The Metal Quarries, which commenced operations in September, 1911, were sold to Quarries, Ltd. early in February, 1936. The State Brickworks were opened up on Crown land in November, 1911, and were sold to Brickworks Ltd., and ceased to be a State undertaking on 23rd February, 1936. Monier Industries, Ltd., took over the State Monier Pipe and Reinforced Concrete Works as from 8th March, 1936, agreeing to complete the unfinished contracts for bridges and other works in progress at the date of purchase. There is one undertaking of a national character, viz., the Murrumbidgee Irrigation Area. The public utilities include the State Abattoirs administered by the Metropolitan Meat Industry Commissioner, the Port Kembla and Burrinjuck Electricity Supply Works, and the Government Grain Elevators. There is also a Government Insurance Office, detailed reference to which is made in the "Private Finance" section of this Year Book. Particulars relating to the Rural Bank of New South Wales and to the Housing and other Funds which the Bank administers, are shown in other chapters of this Year Book.

The receipts and expenditure of the business undertakings and of the Metropolitan Water Board during the year ended 30th June 1936, are shown below:—

Particulars.	Railways.	Tramways.	Omni-buses.	Sydney Harbour Works.	Hunter District Water and Sewerage Board.	Total Business Undertakings.	Metropolitan Water, Sewerage and Drainage Board.
Capital Indebtedness to 30th June, 1936 ...	£ 143,843,072	£ 9,035,789	£ 72,436	£ 11,450,692	£ 5,950,459	£ 170,322,448	£ 43,336,776
Revenue, 1935-36—							
Earnings ... ..	16,953,581	3,388,580	369,166	1,040,610	296,962	22,048,899	2,519,334
Contribution from Consolidated Revenue for Developmental Lines	800,000	...	...	...	...	800,000	...
Total Revenue ...	17,753,581	3,388,580	369,166	1,040,610	296,962	22,848,899	2,519,334
Expenditure, 1935-36—							
† Working Expenses ...	11,945,843	2,900,332	336,553	287,495	100,575	15,570,798	675,476
Interest ... ..	5,700,000	352,000	3,100	450,118	123,228	6,628,446	1,495,731
Sinking Fund ... ..	...	26,600	40	47,329	20,894	94,872	141,506
Exchange ... ..	806,000	49,310	430	64,285	17,599	937,624	144,053
Total Expenditure ...	18,451,843	3,328,251	340,123	849,227	262,296	23,231,740	2,456,856
* Net Revenue, 1935-36	(-) 698,262	60,329	20,043	191,383	34,666	(-) 382,841	62,478

\* Net Expenditure is shown by (-) sign.   † Including Depreciation.

The interest and sinking fund charges in respect of the railways and tramways, as shown above, are approximate amounts which are subject to alteration when the capital indebtedness of these undertakings has been determined finally. Under current legislation the railways are required to contribute a proportion of the sinking fund charges payable under the financial agreement between the Commonwealth and the States, but charges since the 1st July, 1928, to the extent of £19,975,000 have been met from Consolidated Revenue. The sum of £800,000 contributed from Consolidated Revenue towards the loss on the working and maintenance of non-paying developmental railways is the maximum amount payable in each year for this purpose. The Department of Railways received from Consolidated Revenue during 1935-36, £40,522 as reimbursements in connection with losses of revenue consequential upon reductions in freights and charges under the Coal Settlement Agreement, also various amounts as concessions in connection with freight reductions on primary products and stud stock and other forms of assistance to producers.

The following statement shows particulars of the financial transactions of various enterprises, other than the business undertakings, during the year 1935-36.

Enterprise.	Capital Indebtedness to 30-6-36.	Revenue 1935-36.	Expenditure, 1935-36.			Total.	Net Revenue, 1935-36.
			Working Expenses, including Rates, Taxes and Depreciation.	Interest, Sinking Fund.	Ex-change.		
<b>Industrial Undertakings—</b>							
Building Construction ...	£ 32,871	£ 184,965	£ 181,437	£ ...	£ ...	£ 181,437	£ 3,528
Government Tourist Bureau and Resorts ...	198,950	123,593	133,192	4,809	624	138,625	(—) 15,032
Total ...	231,821	308,558	314,629	4,809	624	320,062	(—) 11,504
<b>Other Enterprises—</b>							
Murrumbidgee Irrigation Areas ...	9,414,103	544,715	469,176	239,382	...	708,508	(—)163,793
Metropolitan Meat Industry Board ...	2,355,860	485,017	445,288	30,454	4,349	480,091	4,926
Burrinjuck Hydro-electric Supply ...	942,425	95,393	24,391	51,923	5,100	81,414	13,979
State Coal Mine ...	580,936	157,467	144,275	12,030	1,580	157,885	(—) 418

The expenditures of the activities classified as "Industrial Undertakings" include amounts equivalent to the State and Federal income taxes which would be payable if these concerns were liable to pay such taxes. These amounts were paid into the Consolidated Revenue Fund.

Certain industrial undertakings and enterprises were, in earlier years, very profitable, but recently several concerns showed substantial losses. The Building Construction Branch, however, showed a net profit of £18,129 in 1931-32, of £5,632 in 1932-33, £7,574 in 1933-34, £1,930 in 1934-35, and £3,528 in 1935-36. The State Metal Quarries were in operation from 1st September, 1911. Profits amounting to £16,439 were applied in reducing the capital, and at the 30th June, 1935, the accumulated profit of the undertaking amounted to £79,121. The undertaking was sold in February, 1936.

The State Brickworks started operations as an industrial undertaking in November, 1911, and were sold in February, 1936. Capital expenditure from the funds of the undertaking to 30th June, 1935, was £175,681, repayments of capital £82,326, and reserves amounted to £42,008.

During the period of operation, the gross income amounted to £2,532,402, working expenses, administration, etc., to £2,077,969, and provision for depreciation to £149,631, leaving a net trading profit of £304,802, of which £101,707 was paid as bonuses to employees. The net surplus after payment of interest, etc., was £179,271. The profits of the Building Construction Branch of the Public Works Department from its establishment as a building undertaking on the 1st October, 1913, until the 30th June, 1936, were £232,937 of which £26,663 were applied in the repayment of the original capital expenditure, and £5,360 in the purchase of additional plant. The State Monier Pipe and Reinforced Concrete Works operated as an industrial undertaking from 1st February, 1914. The accumulated funds or net surplus as at 30th June, 1935, totalled £180,149, of which £85,610 have been allocated to reserves and £94,539 to accumulated profit. Repayments of capital amounted to £27,068, and additions to buildings and plant to £44,830. The undertaking was sold on 8th March, 1936.

The Government Tourist Bureau and Tourist Resorts were gazetted as an industrial undertaking as from 1st July, 1928. Previously their transactions were recorded in the Special Deposits Account. The net loss for 1935-6 was £15,032, as against £13,179 for 1934-35. At 30th June, 1928, accumulated profits amounted to £86,016, but losses each year since that date, amounting to £123,325 in all, have resulted in a deficiency as at 30th June, 1936, of £37,309.

Other industrial undertakings established in earlier years are inoperative, and have been de-gazetted, viz., Rozelle Joinery Works, Botany Brick Works, Lime Works at Taree and Botany, Timber Yards at Uhr's Point, Power Station, Sawmills and Hewn Timber Works, and Trawlers. At 30th June, 1936 there remained on them an unpaid loan liability of £295,509 (subject to further adjustment) and an unpaid capital liability of £58,119 to the Consolidated Revenue Fund. The loss on working capital provided by overdraft amounted at the same date to £180,973, and the liability to Consolidated Revenue Fund for interest, etc., to £269,539, making the aggregate loss to the State on these inoperative undertakings £804,140.

The first sales of electricity by the Burrinjuck Hydro-electric scheme were in 1928. At 30th June, 1932, the accumulated deficiency amounted to £26,930. At the end of June, 1933, it had decreased to £15,657. The profit for 1933-34 amounted to £20,128, for 1934-35 to £19,331, and for 1935-36 to £13,979, making the accumulated surplus as at 30th June, 1936, £37,780.

#### SPECIAL DEPOSITS AND SPECIAL ACCOUNTS.

The Special Deposits and Special Accounts form a very important division of the public finances, not only from the nature and volume of the transactions, but also by reason of the manner in which they are used in connection with the general finances of the State. These funds are of great assistance in the banking operations of the Government, and they form a reserve on which the Treasurer may draw to meet temporary requirements. Although the Audit Act provides that the funds cannot be used except for the specific purpose for which they were deposited, it has been the custom for many years to draw on the balances for overdrafts of the Consolidated Revenue Fund and Loan Accounts if required. The great bulk of the funds bear interest, whether invested or not, and the power to use them enables the Government to effect a large saving in the interest which might otherwise be charged for accommodation from the banks. The

following table shows the amount of the Special Deposits and Special Accounts in each of the last fifteen years:—

As at 30th June	Amount.	As at 30th June.	Amount.	As at 30th June.	Amount.
	£		£		£
1922	17,491,833	1927	20,009,040	1932	25,163,347
1923	18,527,873	1928	22,738,617	1933	24,144,728
1924	19,666,636	1929	24,705,014	1934	23,053,914
1925	26,001,112	1930	24,544,829	1935	15,769,982
1926	25,069,338	1931	23,698,304	1936	15,033,653

The amount at the credit of each of these funds at 30th June, 1936, was Special Deposits Account, £14,616,203, and the Special Accounts, £417,450. During 1934-35 an amount of £7,531,261, portion of an advance of £8,465,983 from the Commonwealth Government, previously in Special Deposits Account, was funded. The balance, £934,722, was transferred to General Loan Account in October, 1935.

The amount at the credit of the principal accounts is shown in the following table:—

*Special Deposits Accounts.*

	£		£
Commonwealth Bank Advances		Hospital Fund ... ..	61,314
Deposit Account ... ..	500,000	Treasury Fire Risk Accounts	204,477
Commonwealth Savings Bank of		Public Trustee—Unclaimed	
Australia Deposit Account	7,112,565	Balances of Intestate Estates	282,716
Advances by Commonwealth ...	935	Sundry Security Deposits, etc.	167,273
Fixed Deposit Account ... ..	500,000	Relief to Necessitous Farmers	
State Debt Commissioners'		Working Account ... ..	184,394
Trust Accounts ... ..	399,738	Deposits lodged by Trustee	
Government Insurance Office		companies ... ..	80,870
Funds ... ..	736,846	Workers' Compensation Act—	
Main Roads Board ... ..	200,970	Security Deposits ... ..	574,160
Public Vehicles Account ... ..	166,251	Industrial Undertakings ...	576,346
Liquor Act Compensation Fund	348,375	Government Dockyards ...	241,352
State Lotteries Account ... ..	42,789	Farmers' Relief Act, Advances	
Public Works Department's		Working Account ... ..	20,000
Accounts ... ..	150,552	Sundry Deposits Account ...	68,692
Housing of Unemployed (Grant)		Other ... ..	1,686,005
Act, 1934 ... ..	123,613		
Flour Acquisition Act, 1931 ...	185,970	Total ... ..	£14,616,203

*Special Accounts.*

	£		£
Master-in-Equity Account ... ..	130,395	Prothonotary Account ... ..	13,215
Master-in-Lunacy Account ... ..	19,725	Registrar of Probates' Account	217
Public Trustee Account ... ..	253,898	Total ... ..	417,450

The total sum at the credit of the accounts on the 30th June, 1936 was £15,033,652, of which £1,674,697 was invested in securities; £892,680 was uninvested but used in advances and on public account at interest, the rates allowed ranging from 1 to 4 per cent.; the remainder, £12,048,825, was similarly used, but without any interest allowance. In cases where interest was being paid by the Treasurer on the 30th June, 1936, the rate was 3 per cent., with the following exceptions:—State Debt Commissioners' Trust Account, Municipal Council of Sydney Sinking Fund, 4 per cent.; Main Roads, Wire Netting, and Treasury Fire Risks, 1 per cent.; Insurance Funds, 2½ per cent.; Port Kembla and Burrinjuck Electricity, 2 per cent.; Murrumbidgee Irrigation Areas, 3.816 per cent.

Deposits lodged by trustee companies, and Sundry Security Deposits and Trust Accounts, are allowed interest by the Treasurer at the rate ruling on the stock in which the deposits are invested.

Interest rates allowed on Special Accounts were  $1\frac{1}{2}$  per cent. on Equity and Probate Accounts, 1 per cent. on Lunacy Accounts, and  $2\frac{1}{4}$  per cent. on Public Trustee Accounts.

The funds in the custody of the State Treasurer at credit of Special Deposits and Special Accounts were held as follows:—

Funds.	30th June, 1934.	30th June, 1935.	30th June, 1936.
<b>In Banks—</b>	£	£	£
Special Deposits Account ... ..	21,113,645	13,697,457	12,941,505
Special Accounts ... ..	420,747	422,967	417,450
Australian Consolidated Inscribed Stock ...	847,007	967,952	1,010,800
Deposits on Tenders ... ..	43,610	47,770	49,040
Security Deposits ... ..	588,120	587,510	574,160
Miscellaneous Securities ... ..	40,785	46,326	40,698
<b>Total ... ..</b>	<b>£ 23,053,914</b>	<b>15,769,982</b>	<b>15,033,653</b>

#### STATE LOAN FUNDS.

In recent years the moneys raised on loans, with the exception of a revenue deficiency loan in 1929, and proceeds of Treasury Bills applied to revenue purposes have been credited to General Loan Account. Formerly other loan accounts were in existence for varying periods, but they have, in effect, been amalgamated into a combined account.

The whole of the loans outstanding, with the exceptions noted above, have been raised for capital expenditure on various works and services. Prior to the year 1900 loans not credited to General Loan Account were raised for defence works, for promoting immigration, etc., and some revenue deficits were met, temporarily, by the issue of special Treasury bills. The stocks issued in this way have been repaid from revenue.

The relationship between the loan liability of the State and the net expenditure on loan works and services was as follows as at 30th June, 1936.

	£
Outstanding Loan Liability General Loan Account ... ..	357,530,894
Add Debt liability assumed by Commonwealth Government in respect of transferred properties ... ..	4,788,005
	<u>362,318,899</u>
Less Loans not credited until after 30th June, 1935 ... ..	11,776,590
	<u>350,542,309</u>
Deduct Amounts included in loan liability, but not in net loan expenditure statements—	£
Commonwealth Advance—Grafton—South	
Brisbane Railway ... ..	1,416,762
Conversion of Closer Settlement Debentures	907,650
Loans—	
Revenue Deficiency ... ..	4,965,634
Deficiency Bills ... ..	30,605,000
Advances to Settlers ... ..	120,050
Revenue Deficit 1935-36—Funding ... ..	570,482
* True net expenses of Loan Flotations (including discounts on various issues)... ..	16,009,033
	<u>54,594,611</u>
Add Redemptions from Revenue and Sinking Funds ... ..	295,947,698
	<u>16,600,194</u>
	<u>312,547,892</u>
Deduct Cr. Balance of General Loan Account ... ..	6,171,939
<b>Net Loan Expenditure from General Loan Account on Works and Services ... ..</b>	<b>£306,375,953</b>
Add Balance, Loans Expenditure Suspense Account at 30th June, 1936 ... ..	269,704
<b>Grand Total ... ..</b>	<b>£306,645,657</b>
* Difference between securities sold and proceeds realised.	

*Loan Expenditure.*

The specific services on which the above expenditure has been incurred and the amount expended as at 30th June, 1936, may be classified as follows:—

Work or Service.	Expenditure to 30th June, 1936.
	£
Railways ... ..	a145,299,852
Tramways ... ..	a9,109,683
Omnibuses ... ..	72,436
State Coal Mine ... ..	580,936
Public Buildings, Sites, etc.—	
Land Settlement ... ..	3,967,684
Closer Settlement ... ..	8,290,078
Educational and Scientific ... ..	6,212,782
Charitable, etc. ... ..	3,037,290
Agriculture ... ..	7,200,426
Other ... ..	4,380,356
Industrial Undertakings ... ..	1,870,553
Housing ... ..	1,004,344
Water Supply ... ..	b24,780,632
Sewerage ... ..	16,307,896
Water Conservation and Irrigation ... ..	14,765,225
Roads, Punts, etc. ... ..	6,155,448
Sydney Harbour Bridge ... ..	8,406,831
Bridges ... ..	2,194,149
Harbours and Rivers ... ..	8,664,551
Sydney Harbour ... ..	11,875,381
Immigration ... ..	1,948,703
Electricity Supply ... ..	1,307,352
Relief of Unemployment ... ..	15,197,277
Commonwealth Services, Telegraphs, Defence Works, etc. ... ..	c3,965,937
Queensland Public Works, prior to Separation, 1859...	49,855
<b>Total, Works and Services ... ..</b>	<b>306,645,657</b>

a Adjusted by transfer of certain capital expenditure from tramways to railways. b Exclusive of expenditure incurred by Metropolitan Board from other funds. c Liability has been accepted by Commonwealth Government.

The amounts shown above represent the net expenditure after deducting repayments and recoups. The total, £306,645,657, included expenditure from General Loan Account, £306,375,953, and Loan Expenditure Suspense Account, £269,704.

The following table gives a reconciliation of the loan liability to the Commonwealth, as shown on page 87, with the net expenditure on works and services:—

	£
Expenditure on Works and Services ... ..	306,645,657
Grafton-South Brisbane Railway ... ..	1,416,762
Acquisition of Closer Settlement Estates ... ..	1,039,350
Exchange on Remittances, Discounts and Flotation Expenses, etc. ... ..	16,009,033
Transferred to Consolidated Revenue Fund, to fund Deficiencies ... ..	4,965,634
Utilised towards meeting General Cash Deficiencies ... ..	30,605,000
Advances to Settlers, Inscribed Stock ... ..	120,050
Available towards funding Deficiency, 1935-36 ... ..	570,482
	<b>361,371,968</b>
Less Redemptions from Consolidated Revenue Sinking Fund ... ..	£ 16,600,195
„ Sinking Fund Balance ... ..	653,323
„ Value of Properties Transferred to Commonwealth ... ..	4,788,004
	<b>22,041,522</b>
<b>Total Debt ... ..</b>	<b>339,330,446</b>

*Annual Loan Expenditure (State).*

The actual loan expenditure by the State Government and statutory bodies under its control was as follows in each of the past nine years:

Year ended 30th June.	Actual Loan Expenditure.	Year ended 30th June.	Actual Loan Expenditure.	Year ended 30th June.	Actual Loan Expenditure.
	£		£		£
1928	16,565,543	1931	7,180,708	1934	9,149,527
1929	19,663,889	1932	4,203,586	1935	12,166,785
1930	13,192,755	1933	5,717,976	1936	11,019,596

A summary of the Loan Expenditure Accounts under State and local control is provided below, showing the actual loan expenditure during each of the past five years. Loan moneys expended by Federal and local bodies are not included.

Service.	1932.	1933.	1934.	1935.	1936.
	£	£	£	£	£
Gross amount charged to General Loan Fund in respect of Works and Services.*	4,032,067	4,799,006	7,907,924	10,272,307	9,558,172
Less Loan Expenditure suspense of previous year included above.	.....	.....	111,830	2,000	336,768
Plus Loan expenditure suspense of year	4,032,067	4,799,006	7,796,094	10,270,307	9,221,404
	.....	111,830	2,000	336,768	269,704
Actual expenditure on Works and Services from Treasury Loan Accounts.	4,032,067	4,910,836	7,798,094	10,607,075	9,491,108
Redemption of Closer Settlement Debentures.	.....	.....	.....	.....	.....
Exchange on Remittances. ...	.....	537,762	.....	.....	.....
Expended by Metropolitan Water Sewerage and Drainage Board (a).	171,919	271,043	1,352,099	1,559,710	1,528,988
Commonwealth advance for Grafton-Kyogle-Brisbane Railway.	.....	(—) 1,065	(—) 666	.....	(—) 500
Actual Loan expenditure under State control.	4,203,986	5,717,976	9,149,527	12,166,785	11,019,596

\* Excluding repayments to votes in respect of expenditure during the year shown, and redemptions of Closer Settlement Debentures. (a) Excluding Loans provided from State Funds.

The grand total of the foregoing table represents the approximate gross amount of loan moneys actually expended each year under State as distinct from Federal and local bodies. The figures include the total amount of advances to settlers and local bodies, irrespective of repayments. The amount of repayments to credit of previous years' votes, not deducted above were:—£644,924 in 1931-32; £589,405 in 1932-33; £793,616 in 1933-34; £882,313 in 1934-35; and £2,768,671 in 1935-36. Repayments from Loans Repayment Account are included in the foregoing amounts, viz., £51,640 in 1931-32, £46,441 in 1932-33, £50,196 in 1933-34, £49,786 in 1934-35, and £54,545 in 1935-36.

*Distribution of Annual Loan Expenditure.*

The principal heads of the State loan expenditure on works and services during each of the past three years are shown below in summary form. Full details are shown in tabular form in the Public Accounts and Auditor-General's Reports:—

Work or Services.	Expenditure during year ended 30th June.		
	1934.	1935.	1936.
<b>Railways, Tramways and Omnibuses—</b>	<b>£</b>	<b>£</b>	<b>£</b>
Railways ... ..	440,631	1,767,011	2,541,986
Tramways ... ..	338,119	289,320	172,950
Omnibuses ... ..	.....	15,500	3,500
	<u>778,750</u>	<u>2,071,831</u>	<u>2,718,416</u>
<b>Water Supply, Sewerage, etc.—</b>			
Metropolitan Drainage Works ... ..	...	1,004,078	666,851
Hunter District W.S. & S. Board... ..	241,737	193,499	165,253
Country Towns, Water, Sewerage, etc. ... ..	102,414	602,111	570,815
Water & Drainage (a) ... ..	160,512	271,994	467,357
	<u>504,663</u>	<u>2,071,682</u>	<u>1,870,276</u>
<b>Irrigation, etc.—</b>			
Murrumbidgee Irrigation Area ... ..	55,387	111,210	72,209
River Murray Commission ... ..	118,089	111,704	93,726
Wyangala Storage Reservoir ... ..	183,267	114,445	12,733
	<u>356,743</u>	<u>337,359</u>	<u>178,668</u>
<b>Harbours—</b>			
Sydney Harbour ... ..	10,000	18,804	44,500
Other Harbours, Rivers, Wharves, Docks and Dredges ... ..	89,286	161,609	123,418
	<u>99,286</u>	<u>180,413</u>	<u>167,918</u>
<b>Roads and Bridges—</b>			
Roads and Bridges ... ..	3,777	344,215	230,773
Sydney Harbour Bridge ... ..	72,151	15,835	1,786
	<u>75,928</u>	<u>360,050</u>	<u>232,559</u>
<b>Public Buildings—</b>			
Educational Buildings ... ..	85,244	88,082	197,706
Hospital and Charitable Buildings ... ..	225,737	256,043	186,001
<b>Other Government Buildings—</b>			
Police Stations, Court Houses and Gaols ... ..	112,412	50,825	25,581
	<u>423,393</u>	<u>394,950</u>	<u>409,288</u>
<b>Electricity Undertakings ... ..</b>	<b>10,368</b>	<b>60,754</b>	<b>28,959</b>
<b>Grain Elevators ... ..</b>	<b>322,658</b>	<b>293,259</b>	<b>297,206</b>
<b>Rural Bank—Government Agencies, Housing, etc. ... ..</b>	<b>2,000</b>	<b>162,000</b>	<b>160,000</b>
<b>Advances for purchase of Wire Netting ... ..</b>	<b>25,000</b>	<b>20,000</b>	<b>...</b>
<b>Provision for Unemployment Relief Work ... ..</b>	<b>5,184,900</b>	<b>4,629,236</b>	<b>3,391,065</b>
<b>Other ... ..</b>	<b>14,405</b>	<b>25,541</b>	<b>26,753</b>
<b>Total ... ..</b>	<b>£ 7,798,094</b>	<b>10,607,075</b>	<b>9,491,108</b>
<b>Expended by Metropolitan Water, Sewerage, and Drainage Board* ... ..</b>	<b>1,352,099</b>	<b>1,559,710</b>	<b>1,528,988</b>
<b>Commonwealth Advances—Grafton—Kyogle—Brisbane Railway* ... ..</b>	<b>(—) 666</b>	<b>...</b>	<b>(—) 500</b>
<b>Grand Total Expenditure on State Works and Services ... ..</b>	<b>£ 9,149,527</b>	<b>12,166,785</b>	<b>11,019,596</b>

\*Not included in General Loan Account or State. (a) Including Water Supply and Irrigation Districts, etc.

The amounts expended as shown under the various headings above represent the actual new expenditure during the year—that is, expenditure from General Loan Account plus payments from and less receipts of Loan Expenditure Suspense Account. Repayments to credits of votes, which amounted to £2,768,671 during 1935-36 have not been deducted. This amount included a bookkeeping adjustment of £1,256,383 between the Loan Account and Special Deposits Account, of which £934,722 represented a rebate by the Commonwealth in respect of the State's indebtedness for advances for the settlement of soldiers and sailors on the land. This amount was applied in reduction of loan expenditure on account of Irrigation £185,804, Soldier Settlement £340,417, and Closer Settlement £408,501. The balance of the adjustment, £321,661, reduced the aggregate loan expenditure under certain headings, by the following amounts, Irrigation £57,227, Bridges £39,434, Relief of Unemployed £200,000, and Tramways £25,000.

The State Government's net expenditure from General Loan Account on works and services (exclusive of redemptions, conversions, and renewals of loans, and after deducting repayments to credit of votes) is shown below for the period of thirty-nine years, 1842-1880, in decennial periods from 1881 to 1930, and for each year 1930-31 to 1935-36:—

Years.	During Each Period.		Total at end of Period.	
	Amount.	Per Inhabitant.	Amount.	Per Inhabitant.
	£	£ s. d.	£	£ s. d.
1842-1880	16,316,530	41 12 2	16,316,530	21 9 11
1881-1890	27,639,022	29 8 8	43,955,552	39 3 7
1891-1900	20,515,704	16 6 8	64,471,256	47 12 1
1901-1910	26,876,468	18 0 4	91,347,724	56 11 11
1911-1920	65,228,221	35 5 8	156,575,945	75 13 5
1921-1930	112,957,971	48 1 2	269,533,916	106 10 11
1930-31	*5,951,488	*2 6 9	275,485,404	107 16 8
1931-32	*3,387,144	*1 6 5	278,872,548	108 3 1
1932-33	*4,209,601	*1 12 6	283,082,149	108 16 8
1933-34	*7,114,309	*2 14 5	290,196,458	110 13 8
1934-35	*9,389,994	*3 11 3	299,586,452	113 5 6
1935-36	†*6,789,501	*2 11 1	306,375,953	115 6 7

\* One year.

† After adjustment of £1,256,383, see above.

The amount of expenditure shown above is the gross expenditure from General Loan Account less amounts repaid or recouped to the credit of votes and the amount of discount, flotation charges, etc., on loans, viz., £16,113,816 at 30th June, 1936. On the other hand, the expenditure as shown has not been reduced by the amount of loans redeemed from revenue. A reconciliation between the public debt and the net expenditure on works and services from General Loan Account appears on page 78.

*External Loans Maturing.*

The amounts, rates of interest, and latest dates of maturity of the overseas loans of New South Wales outstanding in London and New York at 30th June, 1936, are shown below:—

Latest Date of Maturity.	Amount.	Rate of Interest.	Latest Date of Maturity.	Amount.	Rate of Interest.
<i>Repayable in London.</i>			<i>Repayable in London.</i>		
	£	per cent.		£	per cent.
15 Aug., 1936	1,617,197	2½	1 Dec., 1965	14,130,000	5
2 Sept., 1936	1,928,055	2½	1 July, 1970	9,322,446	4
30 „ 1936	1,917,500	2½	1 „ 1975	877,502	5
2 Nov., 1936	4,502,524	2½	1 „ 1975	(a) 668,552	1, 1½
1 „ 1937	*12,360,958	3½	1 „ 1975	1,416,762	5
1 Feb., 1938	*6,427,465	3½	Indefinite ...	1,200	5
1 Oct., 1941	12,420,113	3	Overdue ...	8,650	...
1 July, 1943	10,954,600	2½	Total, London..	£161,437,120	...
15 Oct., 1948	9,527,090	4			
15 Mar., 1949	2,871,400	3½	<i>Repayable in New York.</i>		
1 July, 1950	*11,779,928	3½			
15 Dec., 1953	4,901,232	3½	1 May, 1956	£3,892,633	4½
1 July, 1957	17,870,500	5½	1 Feb., 1957	£4,627,042	5
15 April, 1958	21,657,000	3	1 April, 1958	£4,646,872	5
1 June, 1959	3,884,050	3½	Overdue	£4726	...
1 July, 1962	10,392,396	4	Total, New York ...	£13,171,273 (\$64,098,000)	...

(a) Advances from Commonwealth Government under Migration Agreement.

\* Commonwealth may exercise its right of optional conversion.

Overseas loans maturing in London during 1936-37 amount to £9,965,276, consisting wholly of Short Term Debentures at 2½ per cent.

## NATIONAL DEBT CONVERSION LOAN.

As part of the plan (known as "The Premiers' Plan") to meet the economic crisis in Australia consequent on the world depression, the Premiers' Conference held in Melbourne in May and June, 1931, decided to invite holders of Government securities in Australia to convert them into new issues on terms involving reduced rates of interest and alternative dates of redemption.

A brief summary of the remainder of the plan and of the circumstances leading up to it is published on pages 757 to 765 of the Commonwealth Year Book for 1931, and detailed reports of the various conferences have been issued as printed documents by the Commonwealth Parliament. A detailed record of the financial and economic crisis which affected the State in common with Australia as a whole is given in the Commonwealth Year Book for 1936 on pages 960 to 973.

The conversion was authorised in terms of the Commonwealth Debt Conversion Agreement Acts (July and November, 1931); the Commonwealth Debt Conversion Act (August, 1931); and the (State) Debt Conversion Agreement Act (July, 1931) as modified by supplementary and amending enactments. The terms and conditions were set out on page 667 and following pages of the 1930-31 Year Book.

## COST OF RAISING AND MANAGING LOANS.

Operations incidental to the issue of loans in London were formerly conducted by the Bank of England, and more recently by the Westminster Bank Ltd. The former charged ½ per cent. per £100 of stock on all loan issues, and £350 per million annually for the inscription and management of stock, including the payment of the half-yearly dividends, while the latter

charged  $\frac{1}{4}$  per cent. and £150 per million respectively for similar services. At 30th June, 1936, stock to the value of £65,137,274 was managed by the Westminster Bank and the balance by the Commonwealth Bank of Australia.

Since the conversion of the internal loans of Australia into Commonwealth Consolidated Stock in the latter half of 1931, the management of the internal debts of Australian Governments has been conducted by the Commonwealth authorities in accordance with the Commonwealth Inscribed Stock Regulations.

With the approval of the Loan Council Commonwealth securities may be sold at the State Treasury, the proceeds being applied as part of the loan proceeds allocated to the State in terms of the financial agreement. Such issues are not underwritten, and the price of flotation is usually par.

Commission paid for management expenses in connection with the public debt is a charge on the Consolidated Revenue Fund; expenses incurred in the negotiation of loans, such as brokerage, underwriting, printing, etc., are charged against the proceeds of the loans. The amount so charged, together with discounts allowed to subscribers at various issues, amounted to £16,113,816 at 30th June, 1936.

The following statement shows the charges for the negotiation of recent loans, inclusive of the accrued interest and discounts allowed to investors. Local Debentures and Treasury Bills have not been included, as in Sydney they are usually issued at par, and little expenditure, if any, is incurred, while the securities under these headings negotiated in London are generally for short periods pending the flotation of long-dated loans. The statement includes both new loans and conversions:—

Year of Flotation.	Amount of Principal.**	Price of Issue per cent.	Gross Amount Raised.	Costs of Negotiation.	Net Amount Credited to General Loan Account.	Date from which Interest Accrues.	Nominal Rate of Interest.	Date of Maturity.
Issued in London.								
1933-34	(a) 9,527,089	99	9,431,819	127,821	9,304,194	1-9-33	4	15-10-48
"	4,773,266	100	4,773,266	2,236	4,771,030	1-4-33	4	1-7-70
"	(a) 2,980,400	99	2,950,596	40,705	2,909,804	7-12-33	3½	15-3-49
"	(a) 4,901,232	98	4,803,208	67,422	4,735,780	15-9-33	3½	15-12-53
"	(a) 3,979,050	97	3,859,679	(f)	3,859,679	1-6-34	3½	1-6-59
"	6,428,350	99	6,364,072	91,272	6,272,800	1-7-33	3½	1-2-38
1935-36	(d) 12,420,113	100	12,420,113	162,525	12,257,589	1-10-35	3	1-10-41
"	(d) 21,657,000	95½	20,982,435	282,429	20,400,006	15-4-36	3	15-4-58
"	(d) 10,954,600	99	10,845,054	(i)	(i)	15-9-36	2½	1-1-43
Issued in Australia.								
1933-34	4,356,050	99	4,312,490	28,695	4,283,795	\$	3½	15-8-43
"	(h) 6,114,200	98½	6,022,487	(h)	(h) 4,925,000	\$	3½	15-10-48
1934-35	(d) 5,757,620	100	5,757,620	.....	5,757,620	\$	4	15-11-41
"	7,361,360	99½	7,324,553	.....	5,975,000	\$	3½	15-10-49
"	.....	98½	.....	(h) 43,262	(h) 1,054,225	\$	3½	15-10-48
"	2,000	100	2,000	.....	2,000	\$	3½	15-10-48
"	(d) 4,347,300	100	4,347,300	.....	4,347,300	10-8-34	3	10-8-39
"	48,000	100	48,000	.....	48,000	11-12-34	3	15-10-48
"	6,958,880	99½	6,941,483	44,085	6,897,398	\$	3	15-10-48
"	(c) 7,531,261	100	7,531,261	.....	7,531,261	\$	4	\$
1935-36	3,729,480	99½	3,720,156	28,084	3,692,072	26-10-35	3½	15-10-49
"	(i) 4,386,960	98½	(i)	(i)	3,565,000	2-6-36	3½	15-10-51

\$ Various amounts at various dates. \*\* Exclusive of Treasury Bills and Short Term Debentures. (a) Conversions. (c) Commonwealth Advances for settlement of Soldiers. Liability assumed by Commonwealth as from 1-7-33. (d) Renewal. (f) Brought to account in 1934-35. (h) Part credited in 1933-4 and part in 1934-5. (i) Subject to adjustment. Charges to be brought to account in 1936-7.

Temporary accommodation, in the form of Treasury Bills and short term Debentures, is excluded from the foregoing table.

New money has been obtained overseas since 1931-32. Loans during 1932-33, totalling £28,410,269, were conversion loans placed by the Commonwealth on behalf of New South Wales. These conversions resulted in a

saving of £470,945 in the interest payable annually. The interest rates on the old loans converted were 4, 5½ and 6½ per cent. respectively. During 1933-34 other loans totalling £21,387,773 were converted in London, viz., £9,527,089 at 6, £4,901,233 at 5½, £2,980,400 at 5½ and £3,979,050 at 5 per cent., the new rates being respectively 4, 3½, 3½ and 3½ per cent., representing an annual saving in interest of £400,409, and a total saving as a result of the two years' operations of £871,354, with a consequent saving in exchange of £221,106. No conversion loans were placed on the overseas market during 1934-35 for public subscription. Conversions in Australia during 1934-35 by the Commonwealth on behalf of this State amounted to £10,197,070 resulting in an interest saving of £70,390 annually.

During 1935-36 three renewal loans were placed in London by the Commonwealth on behalf of New South Wales, the loans involved totalling £45,031,713. Details are shown in the preceding table. The annual interest payable on the old loans was £1,948,410, this amount being reduced by the renewals to £1,323,565, representing an annual saving in interest of £624,845. The resultant saving in exchange is £158,554, based on the current rate ruling on the transfer of funds from Australia to London.

Discount and flotation expenses on two of the renewals amounted to £1,419,519. These items were not charged during 1935-36 in respect of the third loan of £10,954,600. Short term securities have been renewed from time to time during recent years. The growth of temporary accommodation by means of Treasury Bills and short term Debentures is illustrated in the following table:—

Amount outstanding at 30th June				Australia.	London.	Total.
				£000	£000	£000
1929	...	...	.....	4,000	4,000	4,000
1930	...	...	.....	8,600	8,600	8,600
1931	...	...	9,754	13,117	22,871	
1932	...	...	25,010	12,674	37,684	
1933	...	...	27,890	10,408	38,298	
1934	...	...	29,190	10,113	39,303	
1935	...	...	28,310	10,113	38,423	
1936	...	...	30,605	9,965	40,570	

Interest rates at 30th June, 1933, ranged from 2½ to 3½ per cent. on the London portion, and 2½ to 2¾ per cent. in Sydney. Since that date the rates have been reduced, and at 30th June, 1934, stood at 2½ to 3 per cent. in London, and 2½ per cent. in Sydney. At 30th June, 1936, the London rate was 2½ per cent. The amount outstanding in Sydney consisted of Treasury Bills discounted at 1½ per cent.

#### THE PUBLIC DEBT.

The first loans raised by New South Wales were for the promotion of immigration. From 1831 to 1841 the expenses attached to immigration were met by the Land Fund, into which were paid the proceeds of land sales, but these proved insufficient for the purposes in 1841, and it became necessary to obtain additional funds.

It was, therefore, decided by the Governor to borrow on the security of the Territorial or Land Revenue, and a debenture loan of £49,000 was offered locally on the 28th December, 1841. The loan was issued during 1842 in two instalments, the nominal rates of interest being 5¼d. and 4d. per cent., respectively, per diem. This was the first loan floated in Australia, as well as the first raised by an Australian Government. It was not until 185½ that a loan was placed on the London market.

The amount of public debt outstanding at the end of each year from 1842 to 1860 was published on page 423 of the Official Year Book for 1926-27. The amount of debt at the end of each subsequent year to 1931 is shown on page 661 of the "Statistical Register" for 1930-31.

The Public Debt in November, 1855, when responsible Government was proclaimed, was £1,000,800, distributed under the following heads:—

Raised on the Security of Territorial Revenue—							£
Immigration	...	...	...	...	...	...	423,000
Sydney Railway Company's Loan	...	...	...	...	...	...	217,500
Raised on the Security of General Revenue—							
Amount for Sydney Sewerage	...	...	...	...	...	...	54,900
" " Sydney Water Supply	...	...	...	...	...	...	28,000
" " Railways	...	...	...	...	...	...	256,400
" " Public Works	...	...	...	...	...	...	21,000
Total	...	...	...	...	...	...	£1,000,800

Since 1855 the Debt has grown steadily by reason of loan expenditure.

During recent years it has become increasingly the practice to finance loan expenditure by overdraft on the loan account against the security of special deposits which consist largely of funds made available on loan by the Commonwealth Government. Since 1916, there have been in existence Closer Settlement Debentures and ministerial certificates issued in payment for some of the estates resumed for closer settlement. From time to time some of these debentures have been redeemed from loan funds. During 1934-35 Commonwealth advances, totalling £7,531,261, for the settlement of returned soldiers were funded.

The position of the General Loan Account has thus been altered considerably. In recent years the practice of borrowing temporarily by means of Treasury Bills has become general. By reason of these changes the terms "funded debt" and "public debt" have ceased to retain their former meaning. The comparative tables which follow should be read with these reservations. The term "Loan Liability to the Commonwealth" is common to the accounts of each State, having been introduced under the Financial Agreement of 1927.

The following table shows the amount of "funded" Public Debt outstanding at the end of each year named, the financial year ending on 30th June in 1895 and certain subsequent years:—

Year.	Amount.	Year.	Amount.	Year.	Amount.
	£		£		£
1842	49,500	1875	11,470,637	1910	92,525,095
1845	97,700	1880	14,903,919	1915	127,735,405
1850	132,500	1885	35,564,259	1920	152,776,082
1855	1,000,800	1890	48,383,333	1925	201,702,327
1860	3,830,230	1895	58,220,933	1932	260,375,081
1865	5,749,630	1900	65,332,993	1935	298,678,493
1870	9,681,130	1905	82,321,998	1936	306,006,018

In considering the rate of growth of the debt, attention should be paid to the effect of variations in the purchasing power of the money expended, the steady growth of population throughout the period, the economic development of the State, as measured by the growth of its wealth, income and productiveness, and the earning power of the works constructed from loans.

Furthermore, comparisons of the rate of growth of the State debt with that of other States of Australia should take into account the various distributions of governmental functions as between the State and local governments and the inclusion or non-inclusion of the capital debts of public utilities controlled by governmental authority.

Especial care should be taken in making international comparisons to make due allowance for the differing distributions of debt as between central, provincial and local governments and the existence or otherwise of reproductive assets acquired from loan funds. Superficial comparisons made without reference to these factors lead to very erroneous conclusions.

The following statement shows the amount of Stock, Debentures, Treasury Bills and London Short Term Securities on each register at quinquennial intervals from 1900 to 1936. Stocks are transferable normally from London to Australia:—

As at 30th June.	Stock, Debentures, Treasury Bills, and London Short Term Securities Registered in—					
	London and New York.		Australia.		Total	
	Amount.	Proportion to Total.	Amount.	Proportion to Total.	Amount.	Per head of Population.
	£	per cent.	£	per cent.	£	£ s. d.
1900	55,060,650	84.28	10,272,343	15.72	65,332,993	48 4 9
1905	64,007,550	77.75	18,314,448	22.25	82,321,998	56 12 2
1910	67,154,805	72.58	25,370,290	27.42	92,525,095	57 6 6
1915	86,167,288	67.46	41,568,117	32.54	127,735,405	67 10 11
1920	101,977,445	66.75	50,798,637	33.25	152,776,082	73 16 11
1925	136,064,505	67.45	65,637,822	32.55	201,702,327	87 19 4
1930	168,993,285*	65.10	90,596,682	34.90	259,589,967	102 12 4
1931	176,767,275*†	64.12	98,930,254	35.88	275,697,529†	107 18 4
1932	177,160,053*	64.30	98,344,468	35.70	275,504,521	106 17 0
1933	174,415,820*a	62.32	105,472,298	37.68	279,888,118a	107 12 1
1934	173,609,000*	60.58	112,999,345	39.42	286,608,345	109 6 3
1935	173,394,202*	56.41	133,979,805	43.59	307,374,007	116 4 5
1936	173,191,631*a	55.06	141,362,901	44.94	314,554,532a	118 8 1

\* Including £13,945,628 in 1930, £13,825,624 in 1931, £13,608,138 in 1932, £13,470,461 in 1933, £13,346,142 in 1934, £13,226,343 in 1935, and £13,171,273 in New York.

† Includes £2,950,000 proceeds to be credited in 1931-32.

a Excluding £11,200,678 in 1932-3 and £10,954,600 in 1935-36 loans for conversions, proceeds not credited until following year.

Treasury Bills held in Sydney amounted in 1935-36 to £30,605,000, and Commonwealth Advances in connection with the Grafton-South Brisbane railway to £1,416,762. These amounts added to the £314,554,532 shown in the above table will give £346,576,294, which was the total Loan Liability to the Commonwealth at 30th June, 1936.

Formerly the State Government depended principally on the London money market for the flotation of its loans and more than 84 per cent. of the loans outstanding at 30th June, 1900, were registered in London. As the State developed, however, loanable funds became available on the local market and, despite huge borrowings by the Commonwealth Government in Australia for war purposes, the State's loan capital has been provided to an

increasing extent from local resources. Owing to the stringency on the London money market in the early part of 1927 the State raised two 25,000,000 dollar loans in New York, the total amount of principal being £10,273,973. In the following year the State received £3,955,615, part of the proceeds of a 50,000,000 dollar loan raised in New York by the Commonwealth. At 30th June, 1936, £13,171,273 were outstanding in respect of these New York loans.

#### TOTAL PUBLIC DEBT OF STATE.

The total public debt of New South Wales consists of (a) the stock, debentures, etc., shown in the previous table; (b) the net advances by the Commonwealth Government for various purposes; (c) the amount of debentures and ministerial certificates issued in payment for estates acquired for purposes of Closer Settlement adjusted in accordance with the balance at debit or credit of the closer settlement fund and (d) short term Treasury Bills and debentures. This total is then adjusted by adding overdrafts or subtracting credit balances on general loan account and on loan expenditure suspense account.

Upon the inception of the Commonwealth Financial Agreement on 1st July, 1927 (see page 91), it became necessary to introduce a new classification of items comprised in the public debt. The following table is a summary of items which may be said to constitute the total indebtedness. For reasons given earlier, the classification is not considered quite satisfactory, but is given for comparative purposes.

	Amount of Debt as at 30th June.			
	1933.	1934.	1935.	1936.
	£	£	£	£
Stock and Debentures ... ..	266,820,343	276,355,570	297,261,231	304,589,256
Commonwealth Advances, Grafton-South Brisbane Railway ... ..	1,417,928	1,417,262	1,417,262	1,416,762
Closer Settlement Debentures ... ..	400	.....	.....	.....
Total ... ..	268,238,671	277,772,832	298,678,493	306,006,018
Treasury Bills and Short Term Debentures—				
London ... ..	10,407,776	10,112,776	10,112,776	9,965,276
Sydney ... ..	27,890,000	29,190,000	28,310,000	30,605,000
Total ... ..	38,297,776	39,302,776	38,422,776	40,570,276
Commonwealth Advance for Soldier Settlement ... ..	8,465,983	8,465,983	a	a
LOAN LIABILITY TO THE COMMONWEALTH ... ..	315,002,430	325,541,591	337,101,269	346,576,294
Less Rebate from 30th June, 1927 (Act No. 1, 1935) of part of Commonwealth Advance for Soldier Settlement ... ..	934,722	934,722	.....	.....
LOAN LIABILITY TO THE COMMONWEALTH, AS ADJUSTED, 1935 ... ..	314,067,708	324,606,869	337,101,269	346,576,294
Less Sinking Fund Balances ... ..	461,751	195,888	913,237	653,323
NET DEBT AS DEFINED BY FINANCIAL AGREEMENT ... ..	313,605,957	324,410,981	336,188,032	345,922,971
Closer Settlement Debentures external to Agreement ... ..	131,700	131,700	131,700	131,700
General Loan Overdraft ... ..	6,100,226	6,471,093	.....	.....
Loans Expenditure Suspense Account Overdraft ... ..	111,830	2,000	336,768	269,704
Total ... ..	319,949,713	331,015,774	336,656,500	346,324,375
Less Loan Proceeds due but not credited till following year ... ..	394,490	1,097,487	1,386,360	821,990
Less General Loan Credit Balance ... ..	.....	.....	5,406,836	6,171,939
Less Commonwealth Advances in Special Deposits Account ... ..	8,465,983	8,465,983	a	a
Total Public Indebtedness ... ..	311,089,240	321,452,304	329,863,304	339,330,446

a £7,531,261 was funded in 1935 and included in Stock and Debentures, and the balance of £934,722 (rebate) transferred first to Special Deposits Account then, in 1935-6, to General Loan Account.

Debit balances on revenue accounts are not shown, as treasury bills have been issued in respect of them.

The particular services upon which the amount of £339,330,446 has been expended are shown on page 78.

*Domicile and Rates of Interest on Public Debt.*

The following tables show the amount of New South Wales public debt taken over by the Commonwealth in the various registers, the rates of interest, and the latest dates of maturity as at 30th June, 1936. It should be noted that the rates of interest and the dates of maturity of the debt registered in Australia were altered in August, 1931, in terms of the Commonwealth Debt Conversion Loan, and that these alterations are reflected in the tables here shown:—

Rate per cent.	Payable in—			Total.	Annual Interest Payable.
	New York.	London.	Australia.		
	£	£	£	£	£
5.25... ..	...	17,870,500	...	17,870,500	938,201
5.0375 ... ..	...	...	3,035	3,035	153
5.0 ... ..	9,273,914	16,425,464	...	25,699,378	1,284,969
Total, 5 and over ... ..	9,273,914	34,295,964	3,035	43,572,913	2,223,323
4.65... ..	...	...	572,910	572,910	26,640
4.5 ... ..	3,892,633	...	...	3,892,633	175,168
4.2625 ... ..	...	...	2,124,060	2,124,060	90,538
4.03875 ... ..	...	...	11,246,140	11,246,140	457,577
4.0 ... ..	...	29,241,931	68,479,859	97,721,790	3,908,874
Total, 4 and under 5 ... ..	3,892,633	29,241,931	82,422,969	115,557,533	4,658,797
3.875 ... ..	...	...	84,250	84,250	3,265
3.75... ..	...	7,772,633	20,757,869	28,530,502	1,069,894
3.5 ... ..	...	34,452,401	4,428,150	38,880,551	1,360,819
Total, 3½ and under 4 ... ..	...	42,225,034	25,270,269	67,495,303	2,433,978
3.4875 ... ..	...	...	60,200	60,200	2,097
3.375 ... ..	...	...	7,406,310	7,406,310	249,963
3.25... ..	...	...	5,852,263	5,852,263	190,199
3.125 ... ..	...	...	2,000	2,000	62
3.10... ..	...	...	479,811	479,811	14,876
3.0 ... ..	...	34,977,113	17,956,132	52,033,245	1,560,997
2.90325 ... ..	...	...	173,250	173,250	5,035
2.75... ..	...	10,954,600	...	10,954,600	301,251
2.7125 ... ..	...	...	291,421	291,421	7,905
2.5 ... ..	...	9,965,276	...	9,965,276	249,132
2.325 ... ..	...	...	645,653	645,653	15,011
1.75... ..	...	...	30,605,000	30,605,000	535,587
1.666 ... ..	...	668,552	...	668,552	11,143
1.0*... ..	...	...	799,498	799,498	7,995
Total, under 3½ ... ..	...	55,665,541	64,271,538	119,937,079	3,151,253
Overdue ... ..	4,726	8,650	90	13,466	...
Total ... ..	13,171,273	161,437,120	171,967,901	346,576,294	12,467,351

\* Advance from Commonwealth Government under Migration Agreement.

At the 30th June, 1931, the proportion of total loan liability with interest at rates ranging from 5 to 6½ per cent. was 72.89 per cent. At the 30th June, 1936, 12.57 per cent. of the total ranged from 5 to 5½ per cent., all loans carrying interest at rates above 5½ per cent. having been converted during the intervening years. On the other hand, in 1931, 6.66 per cent., and in 1936, 34.61 per cent. of the total loans were at rates under 3½ per cent.

Additional details are given in the following table:—

Rate of Interest.	As at 30th June, 1931.		As at 30th June, 1933.	
	Amount.	Percentage.	Amount.	Percentage.
	£		£	
5½ to 6½ ... ..	88,461,781	30·7	.....	...
5 to 5½ ... ..	121,540,659	42·2	43,572,913	12·6
4 and under 5 ... ..	38,652,512	13·4	115,557,534	33·3
3½ and under 4 ... ..	20,248,030	7·0	67,495,303	19·5
1 and under 3½ ... ..	19,193,021	6·7	119,937,078	34·6
Matured ... ..	12,750	0·0	13,466	0·0
Totals ... ..	288,108,753	100·0	346,576,294	100·0

*Domicile and Term of Loan Liability to Commonwealth.*

The dates of repayment of the debt extend to 1976, and the sums falling due for redemption each year vary considerably, as will be seen from the following table, which shows, as at 30th June, 1936, the amount repayable in London, in New York and in Australia, and the latest due dates:—

Due Date.	Registered in—				Annual Interest—Payable in—			
	Australia.	London.	New York.	Total.	Australia.	London.	New York.	Total.
	£	£	£	£	£	£	£	£
Overdue ... ..	90	8,650	4,726	13,466	...	...	...	...
Government ... ..	6,070,923	...	...	6,070,923	176,948	...	...	176,948
Option ... ..	30,700,400	9,965,276	...	40,665,676	578,790	208,702	...	787,492
1936-37 (a) ... ..	80,150	18,788,424	...	18,874,574	2,552	657,595	...	660,147
1937-38 ... ..	11,067,081	...	...	11,067,081	436,600	...	...	436,600
1938-39 ... ..	4,813,980	...	...	4,813,980	149,365	...	...	149,365
1939-40 ... ..	711,846	...	...	711,846	30,540	...	...	30,540
1940-41 ... ..	30,736,090	12,420,113	...	43,156,203	1,238,104	372,603	...	1,610,707
1941-42 ... ..	14,836,270	10,954,600	...	25,790,870	545,726	301,251	...	846,977
1942-43 ... ..	4,829,650	...	...	4,829,650	172,365	...	...	172,365
1943-44 ... ..	6,829,612	...	...	6,829,612	265,423	...	...	265,423
1944-45 ... ..	1,100	...	...	1,100	35	...	...	35
1945-46 ... ..	4,782,067	...	...	4,782,067	191,158	...	...	191,158
1947-48 ... ..	13,090,380	12,398,490	...	25,488,870	404,685	488,761	...	893,446
1948-49 ... ..	11,238,240	...	...	11,238,240	393,711	...	...	393,711
1949-50 ... ..	4,753,105	11,779,928	...	16,533,033	190,040	412,298	...	602,338
1950-51 ... ..	4,386,990	...	...	4,386,990	161,512	...	...	161,512
1951-52 ... ..	7,000	...	...	7,000	244	...	...	244
1952-53 ... ..	4,647,185	4,901,232	...	9,548,417	185,871	183,796	...	369,667
1953-54 ... ..	2,700	...	...	2,700	94	...	...	94
1954-55 ... ..	4,539,991	...	3,892,633	8,432,624	181,000	...	175,108	356,108
1955-56 ... ..	...	...	4,627,042	4,627,042	...	...	231,352	231,352
1956-57 ... ..	4,488,444	39,527,499	4,646,872	48,662,815	179,538	1,587,911	232,344	1,999,793
1957-58 ... ..	...	3,884,050	...	3,884,050	...	135,942	...	135,942
1958-59 ... ..	4,529,101	...	...	4,529,101	181,164	...	...	181,164
1959-60 ... ..	4,348,992	...	...	4,348,992	173,900	...	...	173,900
1961-62 ... ..	100,804	10,392,396	...	10,493,200	3,311	415,096	...	419,007
1962-63 ... ..	...	14,130,000	...	14,130,000	...	706,500	...	706,500
1965-66 ... ..	...	9,322,446	...	9,322,446	...	372,898	...	372,898
1970-71 ... ..	...	2,962,816	...	2,962,816	...	125,856	...	125,856
1975-76 ... ..	363,707	1,200	...	364,907	11,282	60	...	11,342
Indeterminable ... ..	...	...	...	...	...	...	...	...
Total (a) £	171,967,901	161,437,120	13,171,273	346,576,294*	5,858,618	5,069,869	638,864	12,467,351
	Percentage of Total Debt :				Average Nominal Rate of Interest :			
	49·62	46·58	3·90	100	£3/8/3	£3/13/11	£4/17/0	£7/11/11

\* Total Loan Liability to Commonwealth.

a Includes short term Debt, Australia £9,605,000  
London £9,965,276.

As against the gross loan liability to the Commonwealth of £346,576,294 the sinking fund balances amounted to £653,323 at 30th June, 1936, making the net liability to the Commonwealth £345,922,971 as shown on page 87.

The due dates of repayment of debt registered in Australia were varied in accordance with the Commonwealth Debt Conversion Loan in the latter half of 1931. The dates of repayment in London and New York remain unchanged.

*Loans Guaranteed by the State.*

Apart from the Loan Liability to the Commonwealth, loans, amounting to £37,763,253 at the 30th June, 1936, have been raised with repayment guaranteed by the State. Of this total the Metropolitan Water, Sewerage and Drainage Board holds £12,051,146, and the Rural Bank of New South Wales £25,712,110.

THE INTEREST BILL OF THE STATE.

The annual interest payable on the loan liability outstanding at 30th June, 1936, is quoted above at £12,467,351. This represents a full year's interest calculated on the various securities outstanding and advances from the Commonwealth Government at each of the respective rates of interest. The amount of interest *actually paid* during the year 1935-36 was £13,151,490, inclusive of £12,343,106 on Debentures and Funded Stock, £529,973 in Treasury Bills, and £278,511 on moneys in the temporary possession of the Government. Part of this interest was due in respect of overdrafts on revenue accounts.

Recoupments by corporate bodies amounted to £7,637,503, thus making the net expenditure from Consolidated Revenue Fund £5,513,987, a reduction of £139,011, as compared with the previous year. Of the net total of £5,513,987 an amount of £875,000 represented interest borne by Consolidated Revenue Fund on behalf of railways.

The total amount and average rate of interest payable on the gross loan liability to the Commonwealth outstanding as at 30th June, 1934 to 1936, are shown below, distinguishing between the various registers:—

Registered in—	As at 30th June, 1934.		As at 30th June, 1935.		As at 30th June, 1936.	
	Annual Interest Payable on Outstanding Loans.	Average Nominal Rate.	Annual Interest Payable on Outstanding Loans.	Average Nominal Rate.	Annual Interest Payable on Outstanding Loans.	Average Nominal Rate.
	£	per cent.	£	per cent.	£	per cent.
Australia ...	5,387,852	3·58	5,541,609	3·42	5,858,618	3·41
London ...	6,608,622	4·09	6,596,806	4·08	5,969,869	3·69
New York...	647,844	4·85	641,854	4·85	638,864	4·85
<b>Total...</b>	<b>12,644,318</b>	<b>3·88</b>	<b>12,780,269</b>	<b>3·79</b>	<b>12,467,351</b>	<b>3·60</b>

The amounts of interest are payable in the currencies of the respective countries, the amount due in New York being payable in dollar equivalent at par. Cost of oversea exchange in remitting interest is not included in the figures shown.

In the latter part of 1931 the rate and amount of interest due on loans registered in Australia were reduced in terms of the Conversion Loan.

*Average Rate of Interest.*

The average rate of interest on the public debt is calculated in two ways, showing the average nominal rate payable and the effective rate or actual rate paid.

The average nominal rates of interest payable on the debt outstanding at 30th June, 1934 to 1936, are shown above. The rate in 1936 was 0.19 per cent. lower than in 1935 and 1.39 lower than in 1929.

The average effective rate of interest is calculated each year to determine the amount of interest properly chargeable to the various undertakings and enterprises. In 1900-01 the rate was 3.66 per cent.; it fluctuated slightly during the next few years, being lowest in 1912-13 at 3.489, and reaching 4.0933 in 1916-17, from which year until 1923-24 it rose gradually to 5.1606 per cent. The rates per cent. calculated in recent years have been: 5.01327 in 1924-25; 5.144 in 1925-26; 5.1312 in 1926-27; 5.12027 in 1927-28; 5.14062 in 1928-29; 5.17204 in 1929-30; 5.14421 in 1930-31; 4.85673 in 1931-32; 4.37804 in 1932-33; 4.12554 in 1933-34; 3.92041 in 1934-5; and 3.81666 in 1935-36, the lowest since 1915-16. Interest at the rates shown was charged to business undertakings in respect of loan capital used by them.

#### REDEMPTIONS AND SINKING FUNDS.

An account of the debt redemptions and sinking funds of New South Wales prior to the transfer to the National Debt Commission in terms of the Financial Agreement, was published on pages 170 and 171 of the Official Year Book for 1929-30. The present sinking fund is described on page 92 hereof.

#### FINANCIAL RELATIONSHIP BETWEEN COMMONWEALTH AND STATES.

The history of the financial relationships existing between the Commonwealth and States since federation in 1901 has been sketched in earlier issues of this Year Book, and the trend of discussions on proposals for the readjustment of these relationships was outlined on page 284 of the Year Book for 1925-26.

#### *Financial Agreement, 1927.*

All the matters under discussion were incorporated in a comprehensive scheme propounded by the Commonwealth and placed before conferences of Premiers in Melbourne in May, 1927, and in Sydney in July, 1927. After amendment the scheme was accepted by all the States and by the Commonwealth, and, except in certain minor matters, it was brought into operation as from 1st July, 1927. The provisions were outlined on page 682 of the 1930-31 Year Book, and full details are given in the Commonwealth Year Book, 1936, on pages 21 to 33.

#### *Australian Loan Council.*

All borrowings by the State are arranged by the Commonwealth, in accordance with the decisions of the Australian Loan Council, which consists of a Minister of the Commonwealth appointed by the Prime Minister, and one Minister of each State appointed by the Premier of the State. The Council determines the amount, rates and conditions of loans to be raised after consideration of the annual programmes submitted by the Commonwealth and by each State. The functions of the Council and the method by which the amounts to be borrowed are determined were outlined on pages 682-3 of the 1930-31 Year Book, and are given in detail on page 23 of the Commonwealth Year Book, 1936.

#### *Transfer of States' Debts to Commonwealth.*

On 1st July, 1929, the Commonwealth took over, in terms of the financial agreement, the debts of the States, and assumed, as between the Commonwealth and States, the liabilities of the States to bondholders. The debts taken over consisted of the balance then unpaid of the gross public debt of each State existing on 30th June, 1927, and of all other debts of each State existing on 1st July, 1929, other than for temporary purposes.

The net public debt of each State represents the gross debt less (1) the value of properties transferred to the Commonwealth, which amounted to £4,788,005 and £10,924,323 for this State and for the Commonwealth respectively, and (2) the balances of the States' sinking funds at 30th June, 1927.

#### *Transferred Properties.*

The Commonwealth had been paying to the various States interest at the rate of  $3\frac{1}{2}$  per cent. on the value of properties transferred to the Commonwealth after federation. For the purposes of the financial agreement new valuations were agreed upon, and on these values the Commonwealth paid to the States during the two years 1927-28 and 1928-29 interest at the rate of 5 per cent. At the end of this period the Commonwealth, on 1st July, 1929, relieved the States of the liability for principal, interest and sinking fund on an amount of debt equal to the value of the properties, each State having agreed to issue to the Commonwealth freehold titles to the properties consisting of land or interests in land.

#### *Payment of Interest on Public Debt.*

The Commonwealth, as agent for the States, has agreed to pay to bondholders interest due on the public debt of the States and, for a period of fifty-eight years from the 1st July, 1927, to contribute £7,584,912 per annum towards the interest, the States paying the balance to the Commonwealth. After that period the whole of the interest due will be paid by the States to the Commonwealth. The amounts paid are equal to the sums paid by the Commonwealth to each State in 1926-27, at the rate of 25s. per head of population, this State's amount being £2,917,411 per annum.

In 1931 and 1932 the State failed to provide certain interest payments on its loans in London and New York, whereupon the Commonwealth Government claimed that the responsibility for oversea borrowing rested upon itself and that it was empowered to seize the revenues of States which default. It accordingly passed the Financial Agreement Enforcement Act early in 1932. The State of New South Wales attacked its validity as being *ultra vires* the Commonwealth Parliament and an infringement of State rights. The High Court upheld the Act and subsequently refused leave to appeal to the Privy Council.

#### *National Debt Sinking Fund.*

A national debt sinking fund was established in terms of the agreement, and is controlled by the National Debt Commission. The annual payments to the fund are contributed partly by the Commonwealth and partly by the States. Contributions in respect of the net debts of the States at 30th June, 1927, and on conversions thereof, are at the rate of 7s. 6d. per cent. per annum, the Commonwealth contributing 2s. 6d. per cent. and the States 5s. per cent. for a period of fifty-eight years, commencing on 1st July, 1927, as regards all States except New South Wales, whose period commenced on 1st July, 1928. On new borrowings after 1st July, 1927 (except those for redemptions or conversions or for funding a State deficit), contributions are at the rate of 10s. per cent. per annum contributed in equal shares by the Commonwealth and the States for a period of fifty-three years from 1st July, 1928, in the case of New South Wales, and from 1st July, 1927, in the case of the other States. Contributions in respect of loans raised to meet revenue deficits accruing after 1st July, 1927, are made by the State concerned, at a rate not less than 4 per cent., for a period sufficient to provide for the redemption of those loans, the contributions being deemed to accumulate at the rate of  $4\frac{1}{2}$  per cent. compound interest. Further information relating to the Sinking Fund was given on page 685 of the 1930-31 Year Book.

Separate accounts are kept by the Commonwealth for each State in respect of debt, interest, and sinking funds. The operations of the National Debt Sinking Fund in regard to the debts of the State of New South Wales during each of the three years ended 30th June, 1936, and the totals since 1st July, 1928, are shown below:—

Heading.	1933-34.	1934-35	1935-36.	Total, 1-7-28 to 30-6-36.
Contributions by—	£	£	£	£
Commonwealth ... ..	517,954	542,969	562,451	3,973,132
New South Wales ... ..	1,166,243	1,286,959	1,335,962	8,078,662
Contributions in terms of Federal Aid				
Roads Agreement ... ..	27,435	27,435	27,435	198,914
Interest ... ..	11,779	5,395	14,666	124,231
Total ... ..	£ 1,723,411	1,862,758	1,940,514	12,374,939
Balance in hands of Commission of contributions prior to Agreement ... ..	...	...	...	30,061
			...	12,405,000
Cost of Repurchases and Redemptions—				
In London ... ..	1,077,909	95,050	1,122,065	5,283,508
In New York ... ..	109,952	114,178	54,166	914,242
In Australia ... ..	476,116	780,275	790,944	4,286,755
Total ... ..	£ 1,663,977	989,503	1,967,175	10,484,505
Exchange on Remittances ... ..	325,287	155,906	233,253	1,267,172
			2,200,428	11,751,677
Balance of Fund, 30th June, 1936 ... ..	...	...	...	653,323

The face value of securities repurchased or redeemed during the eight years was £5,577,719 in London, £1,058,666 in New York, and £4,263,825 in Australia—a total of £10,900,210. The balance at credit of the sinking fund as at 30th June, 1936, was £653,323. The following table indicates the source of contributions by New South Wales during the period:—

Source.	1933-34.	1934-35.	1935-36.	Total, 1-7-28 to 30-6-36.
	£	£	£	£
Metropolitan Meat Industry Commissioner	3,000	2,500	2,503	23,003
Closer Settlement Fund ... ..	47,900	52,248	46,845	342,023
Country Towns Water Supply and Sewerage Works ... ..	14,500	13,500	15,000	95,554
Water and Drainage Trusts ... ..	800	1,000	960	6,200
Main Roads Department ... ..	22,450	25,860	23,930	88,540
State Metal Quarries ... ..	308	309	591	2,242
Consolidated Revenue Fund ... ..	1,025,679	827,311	1,016,668	6,456,772
Met. Water, Sew'ge. and Drainage Board	.....	.....	96,600	289,285
Sydney Harbour Trust ... ..	.....	159,947	60,849	321,946
Sydney Harbour Bridge ... ..	49,591	45,409	...	95,000
Road Transport and Tramways ... ..	250	124,776	26,649	220,940
Hunter District Water Board ... ..	1,765	1,301	44,196	103,088
Other... ..	.....	32,798	1,171	33,969
Total ... ..	£ 1,166,243	1,286,959	1,335,962	8,078,662

## PRIVATE FINANCE.

### CURRENCY.

CURRENCY matters in Australia are under the supervision of the Commonwealth Government. Matters relating to the metallic currency are administered in terms of the Coinage Act, 1909-36, and the paper currency is controlled by the Commonwealth Bank Act, 1911-1932, and the Bank Notes Tax Act passed in 1910.

During the war period restrictions were placed upon the use of gold. The banks and the Mint ceased to issue gold coins to the public, and paper money came into general use. The removal of restrictions on the export of gold re-established the gold standard in international transactions in April, 1925, but the use of notes for internal currency was continued.

In order to protect the currency and public credit of the Commonwealth, the Commonwealth Bank Act was amended in December, 1929, to provide that the Bank Board might (with the authority of the Commonwealth Treasurer) require any persons to furnish particulars of gold coin and bullion held by them and might require them to exchange any gold coin or bullion for its equivalent in Australian notes, such equivalent of gold coin and bullion being the nominal value, £3 17s. 10½d. per oz. of standard gold content, standard gold being eleven-twelfths fine gold. In addition provision was made to prohibit the export of gold overseas except with the concurrence of the Commonwealth Treasurer after recommendation of the Commonwealth Bank Board, but the necessary proclamation in this connection was never issued. Any person travelling overseas was allowed to take with him gold of a value not exceeding £25.

The face value of coins held by banks in New South Wales at 30th June, 1936, was: Gold £18,069, silver £802,487, and copper £41,359. In addition, the Note Issue Department of the Commonwealth Bank held, in Sydney, gold coin to the standard value of £54,160. The corresponding figures as at 30th June, 1935, were: Gold coin £2,433, silver £709,868, copper £39,608, and gold coin in Note Issue Department, Sydney, £507,537.

An estimate of the face value of the currency of New South Wales at five-year intervals between 1901 and 1921 was published in the 1921 issue of this Year Book in the chapter relating to Valuation of Wealth, details being given regarding the sources of data and the method used in formulating the estimate.

### COINAGE.

British or Australian gold coins are legal tender in New South Wales for the payment of any amount, silver coins up to forty shillings, and bronze up to one shilling, but in recent years British coins have practically disappeared from circulation.

A branch of the Royal Mint, London, was opened in Sydney on 14th May, 1855, for minting gold, and operated until 18th November, 1926. Branches are in operation in Melbourne (Victoria), and in Perth (Western Australia). The Commonwealth Coinage Act, 1909, empowers the Federal Treasurer to make and issue silver and bronze coins of specified denominations. A nickel coinage also was authorised, but it has not been issued.

For gold coins the standard fineness is  $\frac{11}{12}$  fine gold,  $\frac{1}{12}$  alloy; for silver coins  $\frac{37}{40}$  fine silver,  $\frac{3}{40}$  alloy; bronze coins are of mixed metal—copper, tin, and zinc. Thus, standard or sovereign gold has a fineness of 22 carats.

and the gold contained in deposits sent to the Mint for melting, assaying, and coining is accounted for at the rate of £3 17s. 10½d., or 3.8937 sovereigns per standard oz. equivalent to £4 4s. 11½d. per oz. fine.

Early in 1930 the price of gold in Australia rose to a premium, and a further advance occurred after the gold standard was suspended in England in September, 1931. Subsequently arrangements were made by which the price for gold lodged at the Mint in Australia is fixed weekly by the Commonwealth Bank on the basis of the forward open market price in London, adjusted to the ruling rate of exchange for telegraphic transfers, Australia on London, less a small allowance for realisation charges.

The following table shows the monthly averages of the daily prices per oz. of fine gold in London and Australia, together with the average value of the sovereign at intervals since 1931. London prices are expressed in sterling and Australian prices in local currency:—

Month.	London.		Australia.		Premium.
	Average Price per Oz. Fine.	Average Value of Sovereign.	Average Price per Oz. Fine.	Average Value of Sovereign.	
	Stg. £ s. d.	Stg. £ s. d.	A £ s. d.	A £ s. d.	Per cent.
1931—					
January to August ...	4 4 11	1 0 0	5 8 0	1 5 5	28.4
September ...	4 11 3	1 1 6	5 17 2	1 7 7	37.9
December ...	6 2 6	1 8 10	7 11 9	1 15 9	78.5
1932—					
June ...	5 13 4	1 6 8	6 19 11	1 12 11	64.7
December ...	6 5 9	1 9 7	7 15 6	1 16 7	83.1
1933—					
June ...	6 2 3	1 8 9	7 10 7	1 15 6	77.2
December ...	6 6 2	1 9 9	7 15 9	1 16 8	83.4
1934—					
June ...	6 17 9	1 12 5	8 10 0	2 0 0	100.1
December ...	7 0 7	1 13 1	8 13 7	2 0 10	104.3
1935—					
March ...	7 6 9	1 14 7	9 1 1	2 2 8	113.2
June ...	7 1 3	1 13 3	8 14 4	2 1 1	105.2
September ...	7 1 0	1 13 2	8 14 0	2 1 0	104.8
December ...	7 1 1	1 13 3	8 14 2	2 1 0	105.0
1936—					
January ...	7 0 11	1 13 2	8 13 11	2 0 11	104.7
February ...	7 0 11	1 13 2	8 13 11	2 0 11	104.7
March ...	7 1 0	1 13 2	8 14 0	2 1 0	104.8
April ...	7 0 10	1 13 2	8 13 10	2 0 11	104.6
May ...	7 0 1	1 13 0	8 12 11	2 0 9	103.5
June ...	6 18 8	1 12 8	8 11 2	2 0 4	101.5
July ...	6 18 11	1 12 8	8 11 5	2 0 4	101.8
August ...	6 18 4	1 12 7	8 10 9	2 0 2	101.0
September ...	6 18 0	1 12 6	8 10 4	2 0 1	100.5
October ...	7 1 11	1 13 5	8 15 2	2 1 3	106.2
November ...	7 2 3	1 13 6	8 15 7	2 1 4	106.7
December ...	7 1 8	1 13 4	8 14 11	2 1 2	105.9
1937—					
January ...	7 1 8	1 13 4	8 14 11	2 1 2	105.9
February ...	7 2 1	1 13 5	8 15 5	2 1 3	106.5
March ...	7 2 4	1 13 6	8 15 9	2 1 4	106.9
April ...	7 1 4	1 13 3	8 14 5	2 1 1	105.3
May ...	7 0 7	1 13 1	8 13 7	2 0 10	104.3
June ...	7 0 7	1 13 1	8 13 6	2 0 10	104.2

Stg.—Sterling.

A.—Australian Currency (see exchange rates, page 121).

Average monthly gold prices for the years since 1930 were published in earlier issues of this Year Book, and current London prices are published in the "Monthly Summary of Business Statistics."

The nominal value of one ounce of standard silver ( $\frac{37}{10}$  fine) is approximately 5s. 6d., and of one pound (avoirdupois) of bronze coined into pence 4s., and into half pence 3s. 4d.

A substantial profit is usually made on the silver and bronze coinage, after the minting and other expenses have been deducted. Under normal conditions, and subject to exchange and incidental costs, the Australian price of silver is determined by transactions in the London market. The average of the London prices (sterling) ruling since 1911 is shown below:—

Year.	Price of Silver per standard oz. (London.)	Year.	Price of Silver per standard oz. (London.)	Year.	Price of Silver per standard oz. (London.)	Year.	Price of Silver per standard oz. (London.)
	s. d.		s. d.		s. d.		s. d.
1911	2 0·6	1919	4 9·1	1925	2 8·1	1931	1 2·6
1914	2 1·3	1920	5 1·6	1926	2 4·7	1932	1 5·9
1915	1 11·7	1921	3 0·9	1927	2 2·1	1933	1 6·1
1916	2 7·3	1922	2 10·4	1928	2 2·7	1934	1 9·2
1917	3 4·9	1923	2 7·9	1929	2 0·5	1935	2 4·9
1918	3 11·6	1924	2 9·9	1930	1 5·7	1936	1 8·1

In 1918 the price of silver in London was subject to regulation by the Imperial Government. It was decontrolled in May, 1919, and commenced to rise in the latter part of the year. The average price in February, 1920, was 7s. 6d. per oz., but it declined thereafter with considerable degree of variation to 12½d. in February, 1931. Subsequently the price moved within relatively wide margins. It rose from 12½d. in August, 1931, to 1s. 5d. in October, 1931, and after a period of comparative stability until the middle of 1934 it rose again, at first gradually and then steeply, to 2s. 9½d. in May, 1935. Following sharp recession to 1s. 8½d. in January, 1936, the price varied but slightly and was 1s. 8d. in June, 1937.

Consideration at the World Economic Conference, held in London in 1933, of measures designed to mitigate fluctuations in silver prices resulted in an agreement between the principal silver using and producing countries to restrict the quantity of silver offered for sale. The agreement is operative for a period of four years from 1st January, 1934. During 1934, however, the United States of America adopted far-reaching measures to acquire silver in terms of the Silver Purchase Act. These operations caused the price of silver to rise steeply, but sharp recession resulted from a modification of United States policy.

## PAPER CURRENCY.

### *Bank Notes.*

Prior to 1910 the right to issue paper currency in New South Wales was vested in private banking institutions which had acquired the right by Royal Charter or by special Act of Parliament. The bank notes current were made subject to a tax of 2 per cent. per annum imposed by the State. In 1910 the Federal Parliament, having authorised the issue of Australian notes, imposed a tax of 10 per cent. on the notes of the trading banks, with the object of forcing them out of circulation. Consequently the value of the bank notes current decreased from £2,213,128 in December quarter, 1910, to £400,784 in the following year. In June quarter, 1936, the amount was £51,537.

### *Australian Notes.*

The Australian Notes Act, 1910, passed by the Commonwealth Parliament, prohibited the circulation of notes by any of the States and authorised the Federal Treasurer to issue Australian notes, in denominations of 10s.,

£1, £5, £10, and multiples of £10, to be legal tender throughout the Commonwealth, and to be payable on demand at the seat of Federal Government. Five-shilling notes were authorised, but have not been issued. The denominations which had been issued as at the end of June, 1937, were 10s., £1, £5, £10, £20, £50, £100, and £1,000.

In December, 1920, control of the Australian note issue was transferred to the Commonwealth Bank, in which a Note Issue department was established. Since the transfer, the notes have been issued by the Commonwealth Bank. They were payable in gold coin at the head office of the Bank until 21st May, 1932, when an amending Act removed the provision for redemption. Under the Act of 1920, the management of the note issue was entrusted to a Board, consisting of the Governor of the Bank as chairman, and three other directors appointed by the Governor-General, one being an officer of the Commonwealth Treasury. Under the provisions of the Commonwealth Bank (Amendment) Act of 1924 the note issue was placed under the control of the Board of Directors of the Bank, but a decision affecting the issue is not effective unless six of the eight directors vote for it at a meeting at which all the directors are present, or five vote for it when any of the directors is absent.

The Act of 1924 authorises the Board to issue Australian notes to banks in Australia in exchange for money or securities lodged with the London branch of the Commonwealth Bank. This provision was made to obviate monetary difficulties arising from accumulation of Australian-owned funds in London.

The profits of the note issue, after paying working expenses and commission to the Commonwealth Bank for the purpose of its general business, are payable to the Treasury of the Commonwealth. In terms of an amending Act passed in 1925, one quarter of the profits was paid to the capital account of the Rural Credits Department of the Bank until 31st December, 1932, when the specified total of £2,000,000 was reached. The money derived from the issue, apart from the reserve, may be invested on deposit with any bank; in securities of the United Kingdom, of the Commonwealth, or of a State; or in trade bills with a currency of not more than 120 days.

The gold reserve in respect of the notes was fixed in 1910 at an amount not less than one-fourth of the notes issued up to £7,000,000, and £ for £ in excess of that amount, but in the following year the Act was amended and the reserve was fixed at one-fourth of the issue. In 1931 an Act was passed reducing the statutory limit of gold reserve to 15 per cent. of the notes on issue during the two years ending 30th June, 1933, 18 per cent. of the notes on issue in 1933-34, 21½ per cent. in 1934-35, and 25 per cent. thereafter.

In May, 1932, the law was amended to provide that the reserve may be held either in gold or in English sterling or partly in both. The part in English sterling must consist of (a) balances with the Bank of England or other banks in London; (b) bills of exchange payable in English sterling maturing in not more than three months; or (c) Treasury bills or other securities of the United Kingdom not exceeding three months' maturity. Any profit accruing by reason of the sale of gold in the reserve must be transferred to a special reserve account for use in stabilising exchange or for the purposes of the Note Issue Department.

The total value of the Australian notes in circulation in New South Wales and elsewhere, and the reserve held against the note issue in various years since 1914, are shown below. The figures for June, 1914, are as at the last Wednesday and those for later years relate to the last Monday of the month:—

End of June.	Australian Notes in Circulation.			†Note Issue Reserve.	
	Held by Banks.	Held by Public.	Total.	Total.	Proportion of Note Circulation.
	£	£	£	£	Per cent.
1914 ...	*	*	9,573,738	4,106,767	42.90
1921 ...	34,303,896	23,924,174	58,228,070	23,478,128	40.32
1926 ...	30,254,509	23,635,726	53,890,226	28,182,387	52.30
1929 ...	17,805,812	24,452,414	42,258,226	22,151,497	52.42
1930 ...	22,342,161	22,572,165	44,914,326	19,931,102	44.38
1931 ...	25,302,258	25,351,168	50,653,426	15,226,530	30.06
1932 ...	26,504,968	24,798,458	51,303,426	10,500,455	20.47
1933 ...	23,346,413	24,207,013	47,553,426	11,506,949	24.20
1934 ...	21,284,099	25,016,859	46,300,958	15,507,537	33.49
1935 ...	20,202,000	26,848,107	47,050,107	15,994,026	33.99
1936 ...	18,253,277	28,791,659	47,044,936	†15,999,240	†34.01
1937 ...	17,536,707	29,502,236	47,038,973	†16,011,663	†34.04

\* Banks held £5,032,140 and public £4,822,774 at 3rd August, 1914 (earliest figures available).

† Consisting solely of gold until July, 1932, thence gold and English Sterling.

‡ Australian currency, previously in gold and Sterling currency.

The Australian note issue amounted to £59,676,401 in October, 1918. This is the maximum since the commencement of the issue, though, after a decline of £5,000,000 in the following year, increases between November, 1920, and March, 1921, brought it to the high level of £59,462,000. By October, 1922, it had fallen below £52,000,000 and remained fairly constant until March, 1924, when notes to the value of £4,200,000 were issued to the banks to discharge certain liabilities incurred by the Federal Government in connection with the war. The amount of the issue increased in this manner was £56,890,226 in May, 1924, and no change was made until notes to the value of £3,000,000 were cancelled twelve months later. Cancellations in July and August, 1926, reduced the issue to £49,890,226 and in March, 1927, to £48,393,226. It was increased temporarily by £3,400,000 in December, 1927, to meet seasonal demand and to facilitate the flotation of a Federal conversion loan which the banks had underwritten. Before the end of the following month, the issue had contracted to £47,893,226 and thereafter the general trend was downward. The value of the notes in circulation was £44,103,226 at the end of July, 1928, and twelve months later it had fallen to £41,608,226—the lowest amount since 1915.

The reduction in the note issue from 1926 to 1929 was due mainly to a diminution of notes held by banks consequent on a change in 1925 in the method of settling interbank clearings. From that date interbank transactions were settled by means of cheques drawn on the Commonwealth Bank, which replaced notes of large denomination formerly used for the purpose. Later it became the policy of the Board of Directors to restrict the note circulation to active requirements and to provide additional currency when required to meet seasonal demands of trade and industry. Consequently the banks found it unnecessary to hold notes in excess of those required as till money and the surplus notes were deposited with the Commonwealth Bank and cancelled. Normally the seasonal demand for currency is at a minimum in July and August, increasing during the later

months of the year owing to the requirements of the rural industries for shearing, harvesting, etc., and rising to a maximum in December over the Christmas holiday period. A marked reduction in the note issue usually occurs in January, after which it declines gradually as the wool, wheat, and other products are sold.

During 1930 the Commonwealth Bank (under the authority of legislation passed in December, 1929) acquired gold from the trading banks in exchange for notes or the right to notes on demand. As a result the notes held by the banks increased from £17,188,000 in January, 1930, to £22,342,000 in June, 1930, and the total issue expanded from £42,639,000 to £44,914,000. During 1931, following the suspension of payments by the Government Savings Bank of New South Wales, notes held by the public and by the banks increased considerably. In March, 1932, notes held by the public were further increased by the suspension of banking transactions by the Government of New South Wales and the withdrawal of bank deposits approximating £1,000,000. Thereafter notes held under both heads decreased gradually, but whereas higher prices realised for primary products and revival of business activity caused notes in the hands of the public to increase from a monthly average of £25,000,000 in 1933, to £25,900,000 in 1934, to £27,500,000 in 1935, and to £29,000,000 in 1936, notes held by the banks continued to decline.

With the exception of the war years, 1915 to 1918, the ratio of the note issue reserve to notes in circulation at the end of June in each year was, until 1931, consistently in excess of 40 per cent. In June, 1931, however, the ratio fell to 30.06 per cent., and in June, 1932, to 20.47 per cent., from which level it had risen to 33.49 per cent. in June, 1933. The amount of the note issue reserve as shown in the preceding table and in monthly statements issued by the Commonwealth Bank decreased from £15,226,530 in June, 1931, to £10,500,439 in August, 1931. Thereafter it increased progressively, being £15,507,537 in February, 1934.

Conversion into sterling of part of the gold held in the note issue reserve first became apparent in July, 1932, when £2,000,000 was held in sterling and £8,499,338 in gold. In November, 1932, sterling increased to £2,700,000 and this amount was unchanged when the quotation of separate particulars of sterling and gold holdings was discontinued at the end of December, 1932.

Prior to July, 1932, the amount of the note issue reserve was expressed in terms of gold currency without adjustment for variations in the value of Australian currency relatively to gold. Following conversion of part of the reserve into sterling assets, however, the amount of the reserve represented the addition of gold currency, as applied to portion of the reserve held in gold, and sterling currency in respect of sterling assets forming part of the reserve. This method was continued until March, 1936, when it became the practice to express the amount of the reserve in Australian currency, the value of gold and sterling assets being converted at current rates of exchange for the purpose. Because of the depreciation of Australian currency from 1930, and of sterling from September, 1931, the amount of the reserve as shown by the table for the years 1930 to 1935 was less than its equivalent in Australian currency.

The special reserve representing premium on gold sold from the note issue reserve amounted to £3,894,905 at 30th June of each of the years 1933, 1934, and 1935. Following a change in procedure, by which items appearing in the balance-sheet of the Note Issue Department are shown in Australian currency, instead of partly Australian and partly sterling, as previously, the special reserve account amounted to £7,752,901 at 30th June, 1936.

*Money Orders and Postal Notes.*

Exchange by means of money orders and postal notes is conducted by the Post Office. The maximum amount which may be transmitted by a single money order is £20, if the place of payment is within the Commonwealth; to places outside the Commonwealth the maximum is £10, £20, £30, or £40, as fixed by arrangement with the country concerned. The following table gives particulars of the money orders issued and paid in New South Wales during the last eight years:—

Year ended 30th June.	Money Orders issued in New South Wales for payment in—				Money Orders issued elsewhere, paid in New South Wales.		
	New South Wales.	Other Australian States.	Other Countries.	Total.	In other Australian States.	Beyond the Commonwealth.	Total.
	£	£	£	£	£	£	£
1929 ...	6,554,752	878,158	492,359	7,925,269	869,859	294,892	1,164,751
1930 ...	6,791,331	871,723	492,530	8,155,584	831,657	308,171	1,139,828
1931 ...	6,412,620	686,091	394,686	7,493,307	747,655	287,833	1,035,488
1932 ...	6,324,052	618,859	158,137	7,101,048	643,575	208,561	852,136
1933 ...	6,218,797	592,474	156,166	6,977,437	610,047	193,498	803,545
1934 ...	6,303,708	622,772	179,968	7,106,448	623,822	195,338	819,160
1935 ...	6,831,078	661,015	168,872	7,160,965	654,377	201,497	855,874
1936 ...	6,766,723	702,642	173,411	7,642,776	709,030	202,268	911,298

The value of money orders issued in New South Wales increased steadily up to 1929-30, after which there were annual recessions until 1932-33. With few exceptions the amount of money orders issued in other Australian States for payment in New South Wales exceeded the amount sent from this State. The favourable balances in respect of international money orders in 1931-32 and subsequent years represents a reversal of the experience in earlier years.

The maximum amount for which a single postal note is issued is £1, and particulars regarding postal notes are shown below:—

Year ended 30th June.	New South Wales Postal Notes paid in—			Postal Notes of other Australian States paid in New South Wales.
	New South Wales.	Other Australian States.	Total.	
	£	£	£	£
1929 ...	1,804,395	728,291	2,532,686	212,860
1930 ...	1,828,878	724,906	2,553,784	192,140
1931 ...	1,710,193	566,987	2,277,180	182,298
1932 ...	2,306,020	251,264	2,557,284	277,030
1933 ...	2,237,746	309,303	2,547,049	237,899
1934 ...	2,414,599	473,746	2,888,345	253,526
1935 ...	2,438,670	450,260	2,888,930	262,417
1936 ...	2,605,470	537,525	3,142,995	276,900

The number of New South Wales postal notes paid in the State during the year ended June, 1936, was 7,490,138, and 1,613,472 were paid in other Australian States. The postal notes paid in New South Wales from issues in other States numbered 875,797.

It is probable that the increase in postal note business in New South Wales since 1930-31 was due largely to the commencement of the State Lottery in August, 1931. It is noticeable that the value of postal notes from other States increased in 1931-32, while there was a marked decline in the value of the New South Wales postal notes sent to other States.

## BANKS.

Institutions which transact banking business in New South Wales are required under the Banks and Bank Holidays Act to furnish to the Chief Secretary in New South Wales quarterly statements of their assets and liabilities; also, when required, to furnish special statistical returns under the State Census Act of 1901. From these returns, and from the periodical balance-sheets issued by the banking companies, the information contained in the following tables has been prepared. Under the Commonwealth Bank Act the banks are required to supply quarterly statements of their Australian business to the Commonwealth Treasurer.

The banking institutions which transact business in New South Wales were fourteen in number at 30th June, 1936. These include two Government banks, a New Zealand bank and two foreign banks. The bulk of the Australian banking business is done by nine private trading banks, of which six have their head offices in Australia and three in London.

The location of the head offices and the distribution of the branches of the fourteen banks operating in New South Wales at 30th June, 1936, are shown in the following table:—

Banks Operating in New South Wales.	Number of Offices in—											Total.
	AUSTRALIA.								ELSEWHERE.			
	New South Wales.	Victoria.	Queensland.	*South Australia.	Western Australia.	Tasmania.	Federal Capital.	Total.	New Zealand.	London.	Other.	
Head Office in N.S.W.—												
Commonwealth of Australia ... ..	193	14	31	5	12	4	1	260	...	2	1	263
Rural ... ..	37	...	...	...	...	...	...	37	...	...	...	37
† New South Wales ...	272	87	88	12	89	3	1	552	71	2	9	634
† Commercial of Sydney ...	222	117	33	5	...	...	1	378	...	1	...	379
Head Office in Victoria—												
† Commercial of Australia ...	86	172	78	(a) 74	38	39	2	489	41	1	...	531
† National of Australasia ...	42	146	44	47	45	2	...	326	...	2	...	328
Head Office in Queensland—												
† Queensland National ...	5	1	94	...	...	...	1	101	...	1	...	102
Head Office in South Australia—												
† Adelaide ... ..	1	1	1	106	2	...	...	111	...	1	...	112
Head Office in London—												
† Australasia ... ..	60	72	19	7	16	11	...	185	46	2	...	233
† Union of Australia... ..	57	50	24	15	21	3	...	170	46	1	...	217
† English, Scottish, and Australian ... ..	93	138	52	(b) 51	15	28	...	380	...	1	...	381
Head Office in New Zealand—												
New Zealand ... ..	1	1	...	...	...	...	...	2	220	1	2	225
Head Office in France—												
Comptoir National... ..	1	1	...	...	...	...	...	2	...	2	572	576
Head Office in Japan—												
Yokohama Specie ... ..	1	...	...	...	...	...	...	1	...	1	39	41
Total ... ..	1,074	800	464	322	238	90	6	2,994	424	13	623	4,059

\* Includes branches in Northern Territory; (a) one, (b) three. † Private Trading Banks, Australian.

The foregoing statement shows the total number of branches of trading banks in New South Wales as at 30th June, 1936. As all important banks operate in New South Wales, the table also shows the virtual number of trading bank branches in Australia.

The Commonwealth Bank of Australia functions partly as a trading bank and partly as a central bank. It controls the note issue, handles the business of the Federal Government and some State Governments, manages the bulk of the Australian public debt and underwrites Government loans.

A number of banking amalgamations have been effected since 1920. Banks absorbed by the English, Scottish and Australian Bank, Ltd., were the London Bank of Australia, Ltd., the Commercial Bank of Tasmania, Ltd., and the Royal Bank of Australia, Ltd.; the Bank of Queensland, Ltd., was absorbed by the National Bank of Australasia, Ltd.; the Bank of Victoria, Ltd., by the Commercial Banking Company of Sydney Ltd.; and the Western Australian Bank and the Australian Bank of Commerce, Ltd., were amalgamated with the Bank of New South Wales. The Primary Producers' Bank of Australia, Ltd., formed in 1923, ceased operations as from 28th September, 1931, and the Rural Bank, which suspended payment on 23rd April, 1931, did not recommence active banking business until late in 1933.

#### *Capital and Profits of Private Trading Banks.*

Particulars relating to the aggregate capital and profits of the six private trading banks with head offices in Australia and three with head offices in England, as listed in the foregoing statement, are shown in the following table. The particulars relate to the whole of the business of the banks in New South Wales and elsewhere. They represent in 1927 and subsequent years profit and loss results for periods ending, and balance sheet figures as at dates within the months of February and October in each calendar year. The New Zealand, French and Japanese banks are not included, as they have only one branch, each with a small business in the State. The Commonwealth and Rural Banks, which are not strictly upon the same trading basis as the private institutions, are also excluded.

Year.	Number of Private Trading Banks.	Capital paid up.	Reserve Fund and Balance of Profit and Loss.	Reported Net Profits.		
				Amount.	Ratio to— Capital.	Total Share- holders Funds.
		£	£	£	per cent.	per cent.
1900	12	14,812,686	4,916,784	1,112,383	7·51	5·64
1910-11	14	14,193,550	8,522,829	1,849,733	13·03	8·14
1920-21	12	23,135,782	17,610,317	3,611,902	15·61	8·86
1927	12	34,773,155	29,395,696	5,058,899	14·54	7·88
1928	11	37,926,871	32,690,838	5,299,508	13·97	7·50
1929	11	38,185,047	33,729,337	5,164,713	13·52	7·18
1930	11	38,426,564	34,450,409	4,617,354	12·01	6·33
1931	11	38,503,764	33,799,695	2,953,916	7·67	4·08
1932	9	37,136,362	32,274,078	1,895,349	5·10	2·70
1933	9	37,136,362	32,373,740	2,018,433	5·43	2·90
1934	9	37,136,362	32,518,752	1,991,719	5·36	2·86
1935	9	37,136,362	32,465,520	2,056,487	5·54	2·95
1936	9	37,136,362	32,649,496	2,198,805	5·92	3·15

The total paid-up capital of the private banks has increased by 60 per cent. since 1921, a sum of £14,000,580 having been added since that year, while reserves and undivided profits have risen by £15,039,179, or 85 per cent. The decrease in paid up capital in 1932 eventuated from the liquidation of the Primary Producers' Bank and the absorption of the Australian Bank of Commerce by the Bank of New South Wales, which subsequently issued new capital as a consequence of the merger. Deposits increased from £237,111,159 in 1921 to £326,652,266 in 1936. These increases were due in small measure to the amalgamation of local banks with banks operating in other States, but not in New South Wales.

The capital of the Commonwealth Bank was £4,000,000 in 1936. Profits for the year ended 30th June, 1931, were £720,372, they declined to £417,368 in 1932-33 and were £464,744 in 1935-36. Stock and debentures issued on behalf of the Rural Bank increased from £5,630,277 in 1931 to £14,483,289 in 1932, the pronounced movement being due to an issue to the Commonwealth Bank as consideration for the assumption by that body of liability in respect of Rural Bank deposits. Stock and debentures outstanding at 30th June, 1936, amounted to £13,992,893. Profits declined from £61,437 in 1930-31 to £19,526 in 1932-33 and thence rose to £31,015 in 1935-36.

*Average Liabilities and Assets within New South Wales (all Trading Banks).*

The following statements, which include particulars of all banks mentioned on page 101, show the average liabilities and assets within New South Wales, exclusive of inter-branch balances and shareholders' funds. Particulars of the Savings Bank Department of the Commonwealth Bank are included under liabilities and assets in the years 1921 to 1928, as the savings and general banking functions were not separated until the end of the year 1927-28.

*Average Liabilities within New South Wales (all Trading Banks).*

June Quarter.	Bank Notes.	Deposits.				Total Deposits.	Other Liabilities.	Total Liabilities within New South Wales (exclusive of Shareholders' Funds).
		Bearing Interest.		Not Bearing Interest.				
		Government.	Other. §	Government.	Other.			
	£000	£000	£000	£000	£000	£000	£000	£000
1895*	1,224	†	20,407	†	10,222	30,629	184	32,037
1900*	1,448	†	20,009	†	12,225	32,234	288	33,970
1911	1,819	†	29,342	†	25,985	55,327	609	57,755
1921†	72	†	(a) 54,631	†	53,045	107,676	3,661	111,409
1926†	65	8,203	(b) 63,098	8,172	51,083	130,556	4,988	135,609
1927†	65	4,717	(c) 71,661	4,791	51,677	132,846	4,814	137,725
1928†	64	4,929	(d) 78,524	2,310	53,047	138,810	5,754	144,628
1929	64	5,086	73,247	2,369	53,914	134,616	6,554	141,234
1930	64	4,136	78,269	2,145	46,143	130,693	9,234	139,991
1931	63	1,993	78,380	1,110	40,133	121,616	9,314	130,993
1932	63	710	69,395	1,859	39,208	111,172	4,831	116,066
1933	57	1,043	73,282	605	39,245	114,175	8,162	122,394
1934	55	561	74,939	1,089	46,156	122,745	8,644	131,444
1935	52	4,090	70,774	662	49,584	125,110	8,340	133,502
1936	52	6,323	68,840	598	50,612	126,373	7,525	133,950
1937	52	5,709	76,505	599	57,805	140,618	10,731	151,401

\* December quarter. † Included in "Other Deposit." § Commonwealth Savings Bank included. § Includes Commonwealth Savings Bank Deposits—(a) £6,309,000, (b) £8,929,000, (c) £9,890,000 and (d) £10,434,000.

The large increase in deposits between 1911 and 1921 was due mainly to the war expenditure and increase in price levels. Since 1921 the rise and fall have been determined mainly by fluctuations in the volume and value of production. Deposits for June quarter (excluding Commonwealth Savings Bank) were at their highest level in 1929, but they declined in each subsequent year until 1932, as a result of falling price levels and diminished business activity. Progressive increases then resulted from business expansion and material movements in 1933-34 and 1936-37 were due to sharp rises in prices realised for important primary products.

The ratio of interest bearing deposits to total deposits increased from 51 per cent. in 1926, to 58 per cent. in 1929, and to 66 per cent. in 1931; thereafter the ratio declined to 63 per cent. in 1932, rose to 65 per cent. in 1933, and then declined progressively to 59 per cent. in 1936.

*Average Assets within New South Wales (all Trading Banks).*

June Quarter.	Coin and Bullion.	Australian Notes.	Advances, Securities, etc.			Landed Property.	Other Assets.	Total Assets in New South Wales.
			Government and Municipal Securities.	Other Advances etc.	Total.			
	£000	£000	£000	£000	£000	£000	£000	£000
1895† ...	7,516	...	§	§	35,707	1,919	480	45,622
1900† ...	6,126	...	§	§	34,385	1,874	651	43,036
1911 ...	14,525	1,771	§	§	42,456	1,872	1,283	61,907
1921† ...	10,152	11,812	§	§	104,709	2,574	3,187	132,434
1926† ...	14,659	16,115	24,425	99,525	123,950	3,113	3,924	161,761
1927† ...	12,244	10,763	26,960	108,480	135,440	3,025	4,813	166,285
1928† ...	12,132	10,375	34,936	105,755	140,691	2,987	4,757	170,942
1929 ...	11,984	11,046	24,325	119,498	143,823	3,188	3,788	173,829
1930 ...	2,254	15,767	22,262	128,762	151,024	3,473	5,513	178,031
1931 ...	908	15,922	16,844	119,509	136,353	3,654	3,287	160,124
1932 ...	1,055	12,510	25,605	113,034	138,639	3,876	2,420	158,500
1933 ...	1,008	12,015	29,714	100,643	139,357	3,801	1,600	157,781
1934 ...	929	13,838	32,181	108,808	140,989	3,846	1,429	161,031
1935 ...	881	13,107	30,060	116,892	146,952	4,173	1,301	166,414
1936 ...	962	11,203	24,747	122,724	147,471	4,292	1,419	165,347
1937 ...	1,135	13,629	26,053	127,288	153,341	4,579	1,257	173,941

\* Includes cash deposited with the Commonwealth Bank by other banks in 1926 and later years.

† December Quarter.

‡ Commonwealth Savings Bank included.

§ Not available.

The cash reserves of the banks consist of coin and bullion, Australian notes and the right to notes. The amount of notes increased very rapidly during the war period when the banks transferred a large amount of gold to the Federal Treasury and rendered assistance to the Government in other ways in connection with war loans, etc., receiving in exchange Australian notes, or the right to obtain notes on demand.

The apparent decline in cash resources in 1927 was due to a change in banking practice, described on page 98. The decline which in noways depleted cash resources of the banks, occurred for the most part in notes held by the General Banking Department of the Commonwealth Bank, and was compensated by increased holdings of securities transferred from the Note Issue Department.

In 1930 and 1931 the trading banks transferred a considerable quantity of gold to the Commonwealth Bank for export, receiving in exchange Australian notes or the right to notes on demand. The decline in cash balances in 1932 was due largely to investments in short dated Treasury Bills, of which the banks still hold a large amount.

The proportion of coin, bullion and Australian notes, etc., to liabilities and to deposits has little significance in relation to the banking figures of one State, especially when particulars of the Commonwealth Bank are included. Moreover, in 1932 and later years the investments of banks in Government securities included substantial amounts of Treasury Bills which were readily convertible into cash. A statement of ratios based on Australian figures is shown on page 107.

Under the head of advances are included overdrafts and loans of all kinds, notes and bills discounted, and a small amount of sundry assets. The bulk of the advances represent overdrafts repayable on demand and secured by the mortgage of real estate, or by the deposit of deeds over which the lending institutions acquire a lien, but the extent to which trade bills are discounted is not disclosed. Investments in short dated Commonwealth Treasury Bills are included under "Government and Municipal Securities." Particulars of Treasury Bills were first made available in 1932, when total holdings in New South Wales amounted to £4,970,136. In June quarter, 1937, they amounted to £6,074,615, being considerably less than total Treasury Bill investments of trading banks, which are held chiefly in other States.

*Average Liabilities and Assets within New South Wales  
(Private Trading Banks.)*

A statement of the liabilities and assets of the trading banks would indicate more clearly their relation to general business conditions in New South Wales if the particulars of the Commonwealth, Rural and overseas banks were excluded, on account of the special nature of their activities. The Commonwealth Bank conducts Federal Government business, controls the note issue, performs other functions of central banking and, until 1928, was engaged in savings bank business. The Rural Bank gives effect to Government policy in promoting rural industry, and for this reason its capital is large when considered in relation to general banking activities. The New Zealand, French and Japanese banks are mainly engaged in facilitating trade between New South Wales and their respective countries, and have only one branch in the State. The following statement has been prepared to show the average liabilities, exclusive of shareholders' funds, and assets within New South Wales of the trading banks, other than the Commonwealth, Rural and overseas banks, in June quarter of the years 1925 to 1937:—

*Private Trading Banks' Liabilities in New South Wales (excluding Commonwealth, Rural, and Oversea Banks with one branch in N.S.W.).*

June Quarter	Deposits Bearing Interest.		Deposits not Bearing Interest.		Total Deposits.	Bank Notes and Other Liabilities.	Total Liabilities in N.S.W.
	Government.	Other.	Government.	Other.			
	£	£	£	£	£	£	£
1925	9,388,218	44,051,346	679,550	44,222,467	98,341,581	1,925,629	100,267,210
1926	8,177,574	49,039,161	813,016	45,788,802	103,818,553	2,156,703	105,975,256
1927	4,703,083	54,461,540	600,303	46,156,840	105,921,766	2,404,180	108,325,946
1928	4,916,303	59,442,091	825,204	46,782,441	111,966,039	2,712,789	114,678,828
1929	5,081,115	62,936,777	770,249	47,381,733	116,169,874	2,732,328	118,902,202
1930	4,128,824	64,896,736	559,201	40,337,664	109,922,425	2,996,084	112,918,509
1931	1,815,218	62,697,193	585,234	34,544,687	99,642,332	1,596,629	101,238,961
1932	451,483	55,687,835	514,340	34,517,368	91,171,026	1,154,732	92,325,758
1933	799,560	58,151,270	467,754	35,956,710	95,375,294	1,091,628	96,466,922
1934	322,457	62,356,412	448,918	42,133,243	105,261,030	1,351,318	106,612,348
1935	755,407	57,550,272	513,493	43,367,870	102,187,042	1,291,484	103,478,526
1936	619,486	56,029,670	460,132	44,200,442	101,309,730	1,432,855	102,742,585
1937	2,029,076	60,607,068	433,170	48,767,572	111,836,886	1,257,403	113,094,289

\* Excluding liabilities to shareholders.

*Private Trading Banks' Assets in New South Wales (excluding Commonwealth, Rural, and Oversea Banks with one branch in N.S.W.).*

June Quarter	Coin, Bullion, Notes, and Cash with Commonwealth Bank.	Advances, etc.			Landed and House Property.	Other Assets.	Total Assets in N.S.W.
		Government and Municipal Securities.	Other Advances, etc.	Total Advances and Securities.			
	£	£	£	£	£	£	£
1925	22,239,782	6,659,806	77,751,633	84,411,439	2,681,025	1,701,578	111,033,824
1926	20,859,888	8,593,870	84,969,000	93,562,870	2,762,856	1,820,598	119,006,212
1927	19,745,062	7,966,317	90,755,134	98,721,451	2,697,013	1,610,265	122,773,791
1928	20,327,376	11,612,407	87,272,588	98,884,995	2,669,112	1,685,043	123,566,526
1929	20,540,415	10,704,932	99,119,013	109,823,945	2,910,393	1,726,474	135,001,227
1930	15,020,670	6,778,319	105,298,029	112,076,348	3,234,047	1,440,181	131,771,246
1931	15,111,510	5,906,431	95,177,477	101,083,908	3,386,339	1,041,625	120,623,382
1932	10,763,774	a 8,265,120	90,453,412	98,718,532	3,408,572	723,060	113,613,878
1933	11,025,889	b 11,976,309	90,489,421	102,465,730	3,318,815	799,857	117,610,291
1934	12,204,911	c 13,647,523	90,020,724	103,668,247	3,354,217	989,391	120,216,766
1935	11,915,394	d 13,152,857	96,983,268	110,086,125	3,456,278	1,023,089	126,480,886
1936	9,993,023	e 6,882,564	100,903,023	107,785,587	3,432,225	1,206,733	122,417,568
1937	12,736,618	f 7,353,313	102,850,224	110,203,537	3,552,967	1,039,263	127,512,385

\*Includes Commonwealth Treasury Bills; (a) £4,350,000; (b) £4,471,539; (c) £4,562,692; (d) £3,828,846; (e) £3,529,231; (f) £3,440,769.

There was a steady expansion of non-governmental deposits between 1925 and 1929, a notable feature being a relative growth of deposits at interest. A marked decrease in non-governmental deposits during the years 1929-30 to 1931-32 was materially offset by increases in 1932-33 and 1933-34. There was then temporary recession until 1935-36, but this movement was succeeded by an increase in 1936-37. Whereas in the initial stages of depression non-interest bearing deposits decreased substantially in 1929-30 and deposits at interest increased temporarily, in the recent period of recovery there has been a continuous increase in non-interest bearing deposits and a decrease in deposits at interest.

The distribution in November, 1927, of £8,000,000 to Australian wool-growers in respect of Bawra operations had the effect of increasing deposits and lessening the demand for advances. Following a protracted decline during the period 1930-31 to 1933-34, advances increased by £6,912,544 in 1934-35, £3,969,755 in 1935-36, and £1,947,201 in 1936-37.

Investments in long term public securities have varied considerably. They increased in 1928, as a result of the underwriting by the banks of the Federal loan raised at the end of 1927. There was an increase from £4,015,120 in June quarter, 1932, to £10,269,246 in March quarter, 1935, followed by a sharp fall to £3,353,333 in June quarter, 1936. The declines between 1929 and 1932 and in 1935-36 were due apparently to the disposal by the banks of investments in Government securities in order to meet the demand for other advances.

The following statement shows for New South Wales and for Australia the ratios of advances, securities, etc., to total deposits and, for Australia, the ratio of cash, etc., to deposits at call and to total deposits. The figures have been compiled on the same basis as those shown in the foregoing tables, in that they relate to private trading banks operating in New South Wales.

*Private Trading Banks—Ratios in New South Wales and Australia  
(Excluding Commonwealth, Rural and Oversea Banks with one branch  
in N.S.W.).*

June Quarter.	New South Wales.		Australia.				
	Ratio of Deposits bearing Interest to Total Deposits.	Ratio of Advances, etc. (excluding Government Securities) to Deposits.	Ratio of Deposits bearing Interest to Total Deposits.	Ratio to Deposits.		Ratio of Cash, etc. † in Australia to—	
				Advances, etc. (excluding Government Securities).	Advances, Government and Municipal Securities, etc.*	Deposits at Call.	Total Deposits.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1925 ...	54.34	79.06	56.38	78.47	82.47	46.07	20.09
1926 ...	55.11	81.84	57.54	80.55	85.53	44.08	18.71
1927 ...	55.86	85.68	58.88	87.13	91.42	44.24	18.19
1928 ...	57.48	77.95	60.60	80.29	87.26	47.44	18.69
1929 ...	58.55	85.32	62.60	85.80	92.01	43.70	16.34
1930 ...	62.79	95.79	66.75	96.77	101.39	43.88	14.59
1931 ...	64.74	95.52	69.19	91.29	95.00	74.11	22.83
1932 ...	61.58	99.21	68.95	81.40	84.90	92.49	28.72
1933 ...	61.81	94.88	67.99	83.94	89.51	83.49	26.72
1934 ...	59.55	85.52	66.23	78.76	84.86	81.55	27.54
1935 ...	57.06	94.86	63.84	85.99	93.96	58.80	21.26
1936 ...	55.92	99.60	62.77	89.07	94.15	51.14	19.04
1937 ...	56.01	91.96	62.12	82.55	87.83	53.22	20.16

\* Excluding Treasury Bills.

† Including Treasury Bills.

Deposits and advances fluctuate from year to year with changes of seasonal and industrial conditions. Deposits increased from 1925 to 1929 under the stimulus of bountiful production and high prices. At the same time an active investment market and industrial and commercial expansion caused a heavy demand for advances.

The extent of changes in banking policy to meet the economic crisis is indicated by the ratios for 1930 and 1931. The ratios for 1932 and succeeding years show the extent of readjustment to new conditions and the increasing utilisation of banking resources during the period of economic recovery.

Commonwealth Treasury Bills have been treated as a cash item in calculating ratios appearing in the foregoing table, but London balances held by the banks have been excluded as particulars were not available. As London balances held by the banks are normally regarded as equivalent to cash in Australia, their exclusion renders the position of the banks more liquid than is indicated by the cash ratios shown.

*Size of Depositors' Accounts.*

A classification of accounts according to the amount of deposit at or about 30th June, 1936, is shown below. The figures include particulars for all banks listed on page 101 with the exception of the Commonwealth Bank, for which the information is not available.

Classification.	Current Accounts.		Fixed Deposit Accounts.		Current and Fixed Deposit Accounts.	
	Number.	Amount at Credit.	Number.	Amount at Credit.	Number.	Amount at Credit.
		£		£		£
£200 and under ...	171,848	7,378,909	42,556	4,269,070	214,404	11,647,979
£201- £500 ...	21,029	6,558,794	22,652	8,222,746	43,681	14,781,540
£501- £1,000 ...	8,431	5,818,344	13,028	10,249,615	21,459	16,067,959
£1,001- £2,000 ...	4,018	5,478,278	6,167	9,096,336	10,185	14,574,614
£2,001- £3,000 ...	1,288	3,040,649	1,743	4,467,210	3,031	7,507,859
£3,001- £4,000 ...	567	1,943,929	675	2,424,632	1,242	4,368,561
£4,001- £5,000 ...	288	1,284,796	557	2,653,732	845	3,938,528
£5,001-£10,000 ...	525	3,576,370	614	4,491,464	1,139	8,067,834
£10,001-£15,000 ...	112	1,322,586	126	1,554,328	238	2,876,914
£15,001-£20,000 ...	56	976,909	58	1,072,450	114	2,049,359
Over £20,000 ...	103	7,047,557	117	9,983,656	220	17,031,213
Total ...	208,265	44,427,121	88,293	58,485,239	296,558	102,912,360

Accounts with balances not exceeding £500 represented 87.03 per cent. of the total number of accounts and 25.68 per cent. of the deposits. Accounts of £2,000 and under represented 97.70 per cent. of the total accounts and 55.45 per cent. of the deposits; 44.55 per cent. of the aggregate amount of the deposits being held in 2.30 per cent. of the accounts. The number of accounts does not represent the number of individual persons who have accounts with the banks.

The proportion of accounts and of deposits in each group as at 30th June, 1936, are shown below:—

Classification.	Proportion of Accounts in each Group.			Proportion of Deposits in each Group.		
	Current Accounts.	Fixed Deposit Accounts.	Total.	Current Accounts.	Fixed Deposit Accounts.	Total.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
£200 and under ...	82.51	48.20	72.30	16.61	7.30	11.32
£201- £500 ...	10.10	25.66	14.73	14.76	14.06	14.36
£501- £1,000 ...	4.05	14.76	7.24	13.10	17.52	15.61
£1,001- £2,000 ...	1.93	6.98	3.43	12.33	15.55	14.16
£2,001- £3,000 ...	0.62	1.97	1.02	6.84	7.64	7.30
£3,001- £4,000 ...	0.27	0.76	0.42	4.38	4.15	4.24
£4,001- £5,000 ...	0.14	0.63	0.29	2.89	4.54	3.83
£5,001-£10,000 ...	0.25	0.70	0.38	8.05	7.68	7.84
£10,001-£15,000 ...	0.05	0.14	0.08	2.98	2.66	2.80
£15,001-£20,000 ...	0.03	0.07	0.04	2.20	1.83	1.99
Over £20,000 ...	0.05	0.13	0.07	15.86	17.07	16.55
Total ...	100.00	100.00	100.00	100.00	100.00	100.00

*Banks' Exchange Settlement.*

The Banks' Exchange Settlement Office was established in Sydney on the 18th January, 1894.

Exchanges are effected daily between the metropolitan banks. The results of the operations are notified to the secretary of the Banks' Exchange Settlement, who notifies each institution daily of the amount of its balance. The Commonwealth Bank Act of 1924 provided that, after a date to be proclaimed, the exchange balances between the banks must be settled by cheques drawn on and paid into the Commonwealth Bank. Pending the issue of the proclamation, the banks inaugurated the system voluntarily as from 27th April, 1925, and for this purpose established accounts with the Commonwealth Bank through which settlements are made in full daily. The daily clearances are still made through the Settlement Office, and since 27th April, 1925, the amount of the cheques drawn on the Commonwealth Bank is included in the exchanges.

The following table shows the growth in the volume of exchanges made through the Settlement Office. The figures represent the aggregate value of cheques drawn on one bank and deposited in another in the metropolitan area and the net balances of transactions at country interbank clearings. Abnormal transactions on Government account in respect of Treasury Bills, which in late years have assumed exceptional magnitude, have been excluded since 1930.

Year.	Amount of Exchanges.	Year.	Amount of Exchanges.
	£		£
1896	117,718,862	1930	†872,387,876
1901	167,676,707	1931	†683,175,641
1911	304,488,435	1932	†588,732,343
1921	709,734,554	1933	†641,401,538
1926	954,253,166	1934	†716,086,124
1928	1,033,511,119	1935	†775,985,112
1929	1,043,324,614	1936	†842,609,556

† Adjusted by excluding Government Treasury Bill transactions.

The figures are affected by amalgamations which have taken place from time to time, as mentioned on page 102, and the suspension of State Government banking transactions during the months of March to May, 1932.

These exchanges exclude the amount of transactions settled by intra-bank cheques and do not therefore represent the total value of transactions settled by cheque. They are, however, considered an indication of the degree of variation in the volume of business transactions settled by cheque from year to year, provided due allowance is made for changes in price levels and amalgamation of banks.

*Index of Bank Clearings.*

The principal statistical application of data as to bank clearings is in measuring variations in business activity over relatively short periods of time. In this connection due allowance has to be made for the facts that

bank clearings (as indicated above) embrace only a proportion of the cheques drawn, that the amount of clearances is diminished from time to time by banking amalgamations and by changes of banking procedure, and that seasonal influences cause fluctuations from month to month in the amount of recorded clearings. Again, from time to time, occurrences such as large conversion loans or heavy governmental transactions swell the amount of clearings to abnormal proportions. Careful inquiry and due allowances are necessary in respect of all these factors before an index of bank clearings can be compiled, and such an index is necessarily an approximation. The data relate substantially to inter-bank clearings in the city and suburbs.

Owing to the change in the method of recording clearing-house transactions, valid comparison is possible only subsequent to May, 1925. In compiling the following index the years 1926 to 1930 (inclusive) are taken as base, and the monthly index represents the ratio per cent. of the actual amount of clearings for each month to the average amount of clearings for that month in the base years after adjustment of both sets of figures to remove the effects of special factors mentioned above. By this means seasonal fluctuations are virtually eliminated. In order to smooth out casual fluctuations the index as published below for each month represents a three months' moving average. That is, the index number for each month is the average of the actual indexes for that month and the two preceding months. The index numbers may be compared vertically or horizontally.

INDEX OF BANK CLEARINGS.

Month.	Average, 1926-1930.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
January ...	100	107	107	102	82	63	68	78	75	89	101
February ...	100	106	107	98	82	62	66	77	75	86	101
March ...	100	106	106	95	81	*	63	75	74	85	98
April ...	100	104	104	94	82	*	63	74	78	87	103
May ...	100	105	104	93	77	*	67	74	79	86	100
June ...	100	103	104	90	75	66	68	78	86	87	103
July ...	100	103	106	89	66	62	68	76	83	85	...
August ...	100	103	108	85	65	64	66	73	84	86	...
September ...	100	106	107	82	64	65	69	73	82	87	...
October ...	100	108	106	80	65	66	70	76	85	91	...
November ...	100	108	103	81	66	68	74	80	89	96	...
December ...	100	107	104	82	64	69	74	77	90	99	...
Year ...	100	106	106	89	72	65	68	76	82	89	...

\* Index not ascertainable on account of suspension of State Government banking transactions.

The averages for respective months in the period 1926-1930 are taken as base and represented by 100. It should be noted that no allowance has been made for normal growth nor for changes of price levels.

#### *Royal Commission on Monetary and Banking Systems.*

A Royal Commission was appointed by the Commonwealth Government in October, 1935, to inquire into the monetary and banking systems of Australia, and to report upon any desirable alterations in the systems and the manner in which they should be effected.

In its report (presented on 16th July, 1937) the Commission reviewed the Australian financial system as a whole, including currency; the trading banks, savings banks, and rural banks; development of the Commonwealth Bank and of central banking practice; the insurance, pastoral finance, trustee, and other financial institutions; and the salient features of Government finance. The working of the system is examined in four periods, viz.: pre-war (1901 to 1914); war-time (1914 to 1920); post-war (1920 to 1929) and depression and recovery (1929 to 1936). The trading bank system is surveyed as regards capitalisation, reserves and profits from the reconstructions which followed the crisis in 1893 to 1936, and in relation to the banking position as it existed in the ten-year period, 1926 to 1936.

In formulating its proposals, the Commission adopted the view that the desirable objective of economic policy should be to promote the fullest possible employment of people and resources under conditions that will provide the highest standard of living, and reduce fluctuations in general economic activity. The finding of a majority of the Commission was that attainment of this objective "will be most likely to follow from a system of central banking in which trading banks and other financial institutions are integral parts of the system, with a central bank which regulates the volume of credit and currency."

After describing the standards to which it was desirable that such a system should conform, the Commission examined the extent to which the present system conforms to those standards, and, in doing so, reviewed at some length the monetary policy adopted and the functioning of the banking system in Australia during the period of depression and recovery from 1929 to 1936. The report embodies a lengthy list of recommendations relating to amendment of banking practice.

Extracts from the statistical data compiled by the Commission in the course of its inquiries are shown below in respect of particulars that have not been previously treated in official publications:—

*Reserves of International Currency (consisting of gold and net assets—excluding Australian securities—held in London) of the Australian Banking System.*

June Quarter.	Commonwealth Bank.		Private Trading Banks.		Total.
	Gold in Australia.	Net London Funds.	Gold in Australia.	Net London Funds.	
		£		sterling million.	
1926.....	31.9	8.6	24.4	32.4	97.3
1927.....	22.2	9.1	24.1	21.0	76.4
1928.....	22.0	11.5	23.5	41.3	98.3
1929.....	22.3	17.0	23.0	32.6	94.9
1930.....	21.2	9.2	2.6	20.0	53.0
1931.....	14.9	4.7	.....	15.9	35.5
1932.....	13.5	9.5	.....	19.2	42.2
1933.....	1.0	28.7	.....	20.3	50.0
1934.....	.....	43.8	.....	24.2	68.0
1935.....	.....	25.9	.....	18.0	43.9
1936.....	.....	22.9	.....	23.5	46.4

Particulars for the Commonwealth Bank include gold and sterling assets held in the Note Issue Department as a reserve against the note issue. Gold holdings shown above relate to the average weekly amount held in the June quarter, whereas London funds substantially represent the amount at the end of the quarter.

The *Approximate Distribution of the Advances of the Private Trading Banks of Australia* was as follows:—

Classification of Borrower.	Proportion of Advances within each Class in Year—			
	1927.	1931.	1935.	1936.
	per cent.	per cent.	per cent.	per cent.
Manufacturing and Mining .....	11.9	9.6	8.8	9.2
Commerce, Transport and Distribution .....	22.6	20.4	18.3	19.0
Finance, Insurance, etc. ....	4.6	4.6	5.6	5.9
Agricultural and Pastoral .....	41.5	47.4	49.8	47.7
Professions, Entertainments and Personal Service .....	5.5	5.4	5.1	5.0
Other, including Advances for Building and to Public Bodies .....	13.9	12.6	12.4	13.2
Total .....	100.0	100.0	100.0	100.0

Where a dissection was provided by a number but not all of the banks the distribution of advances as between agricultural and pastoral industries was approximately equal, while the proportion to total advances of advances made for building purposes was 4.1 per cent., 3.6 per cent., 4.0 per cent. and 4.1 per cent. in the respective years.

*An analysis of rates of interest charged on advances by the private trading banks* was contained in a series of tables, from which the following summary is made (relating substantially to 30th June in each year shown):—

Rate of Interest Charged on Advances.	Proportion of Total Advances.			
	1927.	1931.	1935.	1936.
	per cent.	per cent.	per cent.	per cent.
4 per cent. and under .....	0.85	0.86	5.08	5.38
Over 4 per cent. to 4½ per cent. ....	0.02	...	4.21	3.96
„ 4½ „ 5 „ .....	0.12	0.19	72.09	52.36
„ 5 „ 5½ „ .....	0.32	0.13	14.59	32.51
„ 5½ „ 6 „ .....	3.44	4.82	3.97	5.64
„ 6 „ 6½ „ .....	21.36	12.58	0.06	0.15
„ 6½ „ 7 „ .....	49.96	29.71	...	...
„ 7 „ 7½ „ .....	20.03	41.17	...	...
„ 7½ per cent. ....	3.90	10.54	...	...
Total .....	100.00	100.00	100.00	100.00
Average Rate charged on Total Advances .....	6.93	7.12	4.92	4.99

Variations in the rates of interest charged on overdrafts are shown on page 117.

The distribution of interest-bearing deposits according to the term of deposit and the average rate of interest payable by the private trading banks on interest-bearing deposits were as shown below:—

Term of Deposit.	Proportion of Total Deposits.			
	1927.	1931.	1935.	1936.
	per cent.	per cent.	per cent.	per cent.
3 months and under 6 months.....	2.3	7.4	2.8	3.6
6 " " 12 " .....	5.0	9.2	9.8	10.6
12 " " 24 " .....	17.1	23.0	23.8	25.2
24 " and over .....	68.3	55.5	57.4	54.4
At call, overdue, etc. ....	7.3	4.9	6.2	6.2
Total .....	100.0	100.0	100.0	100.0
Average Rate of Interest Paid on Interest-bearing Deposits .....	4.79	4.84	2.52	2.42

Changes since 1920 in the rates of interest paid on fixed deposits are shown on page 116.

The following table shows the amount of long term Government securities maturing in Australia held by various institutions at 31st December, 1936:—

Institution etc.	Nominal Value.
	£
Commonwealth Bank—General Banking Department .....	27,470,000
" " Savings Bank .....	83,830,000
Trading Banks .....	20,260,000
Savings Banks (other than Commonwealth Savings Bank) .....	42,820,000
Trustee Companies (mainly Trust Funds) .....	38,320,000
Insurance Companies .....	61,980,000
Superannuation Funds .....	15,020,000
Government Trust Funds and Semi-Governmental Authorities .....	20,260,000
Friendly Societies and Trade Unions.....	1,400,000
Other Institutions and General Public .....	275,710,000
Total .....	587,070,000
Bonds, Unclassified .....	25,090,000
Grand Total .....	£ 612,160,000

### INTEREST RATES.

The effective interest rates in the various financial fields are of fundamental importance, as interest charges represent an important factor of cost in certain major industries, and, considered in conjunction with returns from industry, they exercise an influence on the flow of funds into the various channels of investment.

*Yield on Government Securities.*

Most important as a determinant of interest rates in other spheres is the yield on Government securities sold on the Stock Exchanges. Particulars of these are shown below for periods before and after the general conversion of Australian Government securities payable in Australia, to which reference is made on page 83 of this Year Book.

The yields prior to conversion as indicated in the following table, are based upon analyses contained in the official list of the Sydney Stock Exchange. They represent returns to investors, including redemption, on prices quoted in the middle of various months for Commonwealth 5 per cent. to 5½ per cent. issues amounting to approximately £111,000,000 and maturing in the period 1936 to 1950. Interest on these stocks was subject to Federal taxes but not State taxes, the former including a special tax levied on income derived from property in 1929-30 at the rate of 7½ per cent. and increased on income derived in 1930-31 and 1931-32 to 10 per cent.

*Yields Prior to Conversion (Commonwealth 5-5½ per cent., 1936-1950).*

Date.	Redemption Yield per cent.	Date.	Redemption Yield per cent.	Date.	Redemption Yield per cent.
	£ s. d.		£ s. d.		£ s. d.
1927—		1930 ( <i>contd</i> )—		1931—	
March ...	5 6 2	July ...	6 1 10	January ...	6 17 3
1928—		August ...	6 2 2	February ...	7 3 8
February ...	5 9 2	September ...	6 5 8	March ...	6 18 5
1930—		October ...	6 8 3	April ...	6 9 3
April ...	6 1 3	November ...	6 7 3	May ...	7 0 5
May ...	5 16 3	December ...	6 13 3		
June ...	5 14 7				

Under the general conversion of all internal loans in accordance with the Premiers' Plan, interest payable on Government loans was reduced by 22½ per cent., and steps were taken, partly by legislation, to procure a corresponding decrease in interest rates generally. Following conversion, yields on Government securities declined with minor fluctuations to approximate parity with the nominal interest rate of 4 per cent. payable on the bulk of converted securities. This level was reached towards the end of 1932 and the lowest point, following further decline, in November, 1934.

Subsequently yields increased gradually to £4 1s. 2d. per cent. in February, 1937, in respect of the average for all loans having a currency of more than five years, but they then declined to £3 15s. 4d. in June, 1937, as compared with £3 3s. 5d. in November, 1934.

The monthly averages of weekly statements of yields on the Melbourne Stock Exchange are shown in the following table at intervals since October, 1931, following conversion, to June, 1937.

*Yields subsequent to Conversion (Commonwealth Issues maturing after 5 years to 1961).*

Month.	Redemption Yield Per cent. on Stock Maturing.				Month.	Redemption Yield Per cent. on Stock Maturing.			
	Over 5 to 10 years.	Over 10 to 15 years.	Over 15 years.	Overall.		Over 5 to 10 years.	Over 10 to 15 years.	Over 15 years.	Overall.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.
1931—					1935—				
October ...	6 5 0	5 12 11	5 4 3	5 9 3	March ...	3 4 11	3 6 6	3 11 11	3 7 9
November ...	5 18 0	5 5 7	4 19 3	5 3 7	June ...	3 8 8	3 9 6	3 13 6	3 10 7
December... 4 16 8	4 13 11	4 10 8	4 12 3		September...	3 16 6	3 15 3	3 18 2	3 16 7
1932—					December...	3 14 11	3 14 9	3 16 11	3 15 6
March ...	5 2 0	5 1 4	4 15 5	4 17 4	1936—				
June ...	5 0 3	4 18 10	4 14 5	4 16 1	March ...	3 16 10	3 16 10	3 18 10	3 17 5
September...	4 1 8	4 2 2	4 1 11	4 1 11	June ...	3 18 2	3 18 3	3 19 7	3 18 7
December... 3 18 11	3 19 1	3 19 3	3 19 1		July ...	3 17 5	3 18 4	3 19 2	3 18 4
1933—					August ...	3 18 0	3 19 0	3 19 10	3 19 0
March ...	3 14 10	3 17 4	3 17 8	3 16 9	September...	3 17 0	3 18 9	3 19 10	3 18 7
June ...	3 12 8	3 15 2	3 16 4	3 15 0	October ...	3 16 9	3 18 8	3 19 2	3 18 4
September...	3 12 2	3 13 10	3 14 11	3 13 10	November...	3 17 2	3 19 4	4 0 0	3 19 0
December... 3 9 8	3 11 1	3 13 6	3 12 1		December...	3 19 4	4 0 0	4 0 5	4 0 0
1934—					1937—				
March ...	3 7 11	3 9 1	3 12 5	3 10 4	January ...	3 19 10	4 0 9	4 0 5	4 0 5
June ...	3 4 6	3 4 7	3 9 2	3 6 8	February ...	4 1 2	4 1 5	4 0 10	4 1 2
September...	3 4 0	3 4 0	3 8 8	3 6 0	March ...	4 0 10	4 1 5	4 0 7	4 1 0
October ...	3 1 9	3 2 6	3 6 1	3 3 9	April ...	3 18 2	3 19 4	3 19 6	3 19 2
November...	3 1 2	3 2 6	3 6 4	3 3 5	May ...	3 15 7	3 18 2	3 18 11	3 17 10
December... 3 2 1	3 3 1	3 7 7	3 4 3		June ...	3 13 0	3 15 6	3 16 11	3 15 4

Yields quoted in the table relate to all Commonwealth loans with an unexpired currency of more than five years at the various dates shown, including those converted and all issues since conversion. Where repayment is optional between certain dates, the latest date has been adopted in determining maturity for the purposes of grouping and calculation of yields. The nominal rates of interest payable range between 3 per cent. and 4 per cent., though the bulk of the loans carry interest at the latter rate. A large proportion of the loans is acceptable by the Commonwealth Treasury at par-value for payment of Federal Estate Duty; loans not acceptable include recent issues which have been incorporated in the table as from initial quotations on the Stock Exchange.

Interest on converted stocks and stocks issued subsequently is free of State income tax but is subject to Federal income tax to the limit of rates existing at the date of conversion. It was free also of the special Federal property tax for the duration of that tax, which was levied first at the rate of  $7\frac{1}{2}$  per cent. on income from property earned in 1929-30 and abolished in respect of income earned in 1935-36, after having been increased to 10 per cent. on incomes in 1930-31 and 1931-32, and then reduced to 6 per cent. in 1932-33 and 1933-34, and to 5 per cent. in 1934-35. A short review of the rates of tax payable on income appears on page 46 *et seq.*

*Commonwealth Treasury Bills.*

Commonwealth Treasury Bills were first issued in 1927 to provide cash to retire the unconverted portion of a maturing Commonwealth loan. These Bills were paid on maturity and a further issue of £1,000,000 in 1928 was similarly repaid. In 1929 recourse was again made to Treasury Bills as a means to provide finance for Governments, and since that date there has always been a considerable volume of Bills outstanding. They are discounted exclusively by the Commonwealth Bank and the trading banks, although on 16th March, 1936, a single issue of small amount was made available for discount by the public. In 1931 the Commonwealth

Bank guaranteed that the bills taken up by the trading banks would be redeemed on maturity, and undertook to re-discount them on demand during currency at the rate of interest at which they were issued. In respect of new issues or re-issues of Treasury Bills after 30th June, 1934, the guarantee of repayment was withdrawn, and re-discounting is undertaken by the Commonwealth Bank at a rate to be fixed at the time of the transaction. Variations since June, 1927, in the rates of discount are:—

Treasury Bills.						Rate of Discount.
						Per cent.
1927—June	...	...	...	...	...	4
1928—February	...	...	...	...	...	4½
1929—October	...	...	...	...	...	5½
1930—October	...	...	...	...	...	6
1931—July	...	...	...	...	...	4
1932—November	...	...	...	...	...	3½
1933—January	...	...	...	...	...	3½
February	...	...	...	...	...	2½
June	...	...	...	...	...	2½
1934—April	...	...	...	...	...	2½
October	...	...	...	...	...	2
*1935—January	...	...	...	...	...	1½

\* Rate unchanged, August, 1937.

#### Fixed Deposit Rates.

The trading banks provide a large part of the temporary financial accommodation needed in various business activities. Part of the funds for this purpose are obtained as fixed deposits from customers. The rates of interest paid by trading banks to such customers in New South Wales have varied as follow in recent years:—

Month of Change.	Fixed Deposit Rates—Period of Deposit.			
	3 months.	6 months.	12 months.	24 months.
	Per cent.	Per cent.	Per cent.	Per cent.
July, 1920	3½	4	4½	5
August, 1927	4	4	4½	5
January, 1930	4½	4½	5	5½
June, 1931	3½	3½	4	4½
November, 1931	3	3½	3½	4
March, 1932	2½	3	3½	4
May—June, 1932	2½	3	3½	3½
August, 1932	2½	2¾	3	3½
November, 1932	2½	2¾	3	3½
February, 1933	2	2½	2¾	3
April, 1934	2	2½	2½	2¾
August, 1934	1½	2½	2½	2¾
October, 1934	1½	2	2½	2½
*March, 1936	2	2½	2¾	3

\* Rates unchanged, August, 1937.

Rates of interest allowed by the Commonwealth Bank correspond at recent dates with those of private banking institutions, though they differed somewhat in earlier years. A divergence in rates existed in the period dating from 17th December, 1934, to 23rd March, 1936, during which the Commonwealth Bank rates for deposits at three and six months were 1 per cent. and  $1\frac{1}{2}$  per cent. respectively.

The comparatively high level of interest rates ruling during the period 1920-1929 was due to a steady demand for accommodation to finance investment. The increase in January, 1930, synchronised with the onset of the depression when banking deposits began to decrease while, pending the slower liquidation of stocks and adjustment to lower price levels, advances increased. The result was that though deposits on current account declined very heavily, fixed deposits were substantially maintained. The reductions from June, 1931, followed upon undertakings entered into at the Premiers' Conference in that month, and were assisted by the existence of a high proportion of fixed deposits and a small volume of investment activity. The rates were raised in March, 1936, following upon recovery in business and investment activity, with consequent growth of bank advances and relative diminution of fixed deposits.

It should be noted that the alterations in rates apply to deposits lodged or renewed after the date of change and not to deposits accepted at previous rates.

#### *Overdraft and Discount Rates.*

According to information supplied by trading banks, the dates of change and the altered rates of interest on overdrafts and discounts charged by certain trading banks were as follow:—

Date.	Overdraft Rates.	Rates of Discount on Bills at—	
		Three months.	Over three months.
July, 1920 ... ..	Per cent. 6 to 8	Per cent. 5 to 6	Per cent. 6 to 7
January, 1924 ... ..	6 to 8	$5\frac{1}{2}$ to 7	$5\frac{1}{2}$ to 7
January, 1925 ... ..	6 to 8	$5\frac{1}{2}$ to 7	6 to 7
August, 1927 ... ..	$6\frac{1}{2}$ to 8	6 to 7	$6\frac{1}{2}$ to 7
March, 1930 ... ..	7 to $8\frac{1}{2}$	$6\frac{1}{2}$ to $7\frac{1}{2}$	7 to $7\frac{1}{2}$
July, 1931 ... ..	5 to 7	5 to 7	5 to 7
July, 1932 ... ..	5 to 6	5 to 6	5 to 6
June, 1934 ... ..	$4\frac{1}{2}$ to $5\frac{1}{2}$	$4\frac{1}{2}$ to $5\frac{1}{2}$	$4\frac{1}{2}$ to $5\frac{1}{2}$
July, 1934 ... ..	$4\frac{1}{2}$ to 5	$4\frac{1}{2}$ to 5	$4\frac{1}{2}$ to 5
April to August, 1936 ...	$4\frac{1}{2}$ to $5\frac{1}{2}$	$4\frac{1}{2}$ to $5\frac{1}{2}$	$4\frac{1}{2}$ to $5\frac{1}{2}$
October 1936 ... ..	$4\frac{1}{2}$ to $5\frac{1}{4}$	$4\frac{1}{2}$ to $5\frac{1}{4}$	$4\frac{1}{2}$ to $5\frac{1}{4}$

The foregoing rates, quoted as a range between the minimum and maximum rates charged, are subject to influences similar to those affecting rates of interest on fixed deposits over the same period.

Rates of interest charged on various types of advances by the Commonwealth Bank of Australia and the Rural Bank of New South Wales are indicated below, quotations in each instance representing maximum rates charged as at the various dates of change shown. Where no rates are shown against any month the next preceding quotation was operative.

Date of Change.	Commonwealth Bank—Overdrafts.		Rural Bank of New South Wales.		
	General Banking Department.	Rural Credit Department.	Rural Bank Department.		Advances for Homes Department.
			Long Term Loans.	Overdrafts.	
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
January, 1930	... ..	... ..	... ..	... ..	... ..
July, 1930	... ..	... ..	... ..	... ..	... ..
July, 1931	... ..	... ..	... ..	... ..	... ..
October, 1931	... ..	... ..	... ..	... ..	... ..
July, 1932	... ..	... ..	... ..	... ..	... ..
December, 1932	... ..	... ..	... ..	... ..	... ..
January, 1933	... ..	... ..	... ..	... ..	... ..
July, 1933	... ..	... ..	... ..	... ..	... ..
April, 1934	... ..	... ..	... ..	... ..	... ..
July, 1934	... ..	... ..	... ..	... ..	... ..
September, 1934	... ..	... ..	... ..	... ..	... ..
October, 1934	... ..	... ..	... ..	... ..	... ..
November, 1934	... ..	... ..	... ..	... ..	... ..
January, 1935	... ..	... ..	... ..	... ..	... ..
April, 1935	... ..	... ..	... ..	... ..	... ..
† January, 1937	... ..	... ..	... ..	... ..	... ..

\* Rates prevailing prior to January, 1930.

† Rates reduced in terms of Interest Reduction Act, 1931.

‡ Rates unchanged, August, 1937.

The increased Rural Bank rate of  $4\frac{3}{4}$  per cent. in January, 1937, was charged to the general body of borrowers only in respect of overdrafts. For long term advances in both departments the higher rate was charged to new borrowers only, until extended substantially to existing borrowers in April, 1937. As from February, 1937, the nominal rate of interest arranged in respect of new long term loans was increased to 5 per cent., but the rate actually charged was  $4\frac{3}{4}$  per cent.

#### *Savings Bank Deposit Rates.*

Variations since 1928 in the rates of interest paid by the Commonwealth Savings Bank of Australia on the minimum monthly balances at the credit of depositors were:—

Month of Change.	Rate of Interest on Balances.			
	Under £500.	£500 to £1,000.	£1,000 to £1,300.	Societies not Operating for Profit. *
	Per cent.	Per cent.	Per cent.	Per cent.
Prior to October, 1928	... ..	... ..	... ..	... ..
October, 1928	... ..	... ..	... ..	... ..
July, 1931	... ..	... ..	... ..	... ..
July, 1932	... ..	... ..	... ..	... ..
November, 1932	... ..	... ..	... ..	... ..
June, 1934	... ..	... ..	... ..	... ..
† January, 1935	... ..	... ..	... ..	... ..

\* Whole amount of balance. † Rates unchanged, August, 1937.

*Mortgage Interest Rates.*

The trend in New South Wales of interest rates charged on loans secured by mortgage is indicated in the following table from August, 1933, the month in which information was first collected. The rates of interest are the actual (as distinct from the penal) rates recorded in first mortgages registered during the three months ended in the month shown in the names of mortgagees who were private individuals or private corporations. Where identifiable, renewals and collateral mortgages are omitted, as also are mortgages taken by banks and Governmental agencies.

* Period.	Weighted Average *Rate of Interest on First Mortgages Registered.		* Period.	Weighted Average *Rate of Interest on First Mortgages Registered	
	Rural Securities.	Urban Securities.		Rural Securities.	Urban Securities.
	Per cent.	Per cent.		Per cent.	Per cent.
1933—	per annum.	per annum.	1936—	per annum.	per annum.
October .....	5.5	5.9	January .....	4.8	5.4
November .....	5.4	5.8	February .....	4.9	5.3
December .....	5.4	5.7	March .....	4.9	5.2
			April .....	4.9	5.2
1934—			May .....	5.0	5.2
March .....	5.2	5.4	June .....	4.9	5.2
June .....	5.1	5.4	July .....	4.8	5.2
September .....	5.2	5.4	August .....	4.7	5.3
December .....	5.0	5.2	September .....	4.8	5.3
			October .....	4.9	5.2
1935—			November .....	5.0	5.2
January .....	4.9	5.2	December .....	4.9	5.2
February .....	4.8	5.2			
March .....	4.8	5.2	1937—		
April .....	4.7	5.2	January .....	4.9	5.3
May .....	4.7	5.2	February .....	4.9	5.3
June .....	4.6	5.2	March .....	4.9	5.2
July .....	4.7	5.3	April .....	5.0	5.2
August .....	4.7	5.2	May .....	4.9	5.3
September .....	4.8	5.2	June .....	4.9	5.3
October .....	4.9	5.1	July .....	4.9	5.3
November .....	4.9	5.2	August .....	5.1	5.3
December .....	4.9	5.3			

\* Three monthly moving average ended month shown.

Interest chargeable by the trading banks is usually stated as being at "prevalent rate," corresponding with particulars regarding overdrafts appearing on page 117. Particulars of rates of interest charged by the Rural Bank are shown on page 118. Advances by the Government of New South Wales, mainly to primary producers, are made usually at lower rates than are obtainable from other sources. No data are available to indicate the general level of interest rates on the large amount of mortgage indebtedness existing at the introduction of the moratorium, which was, however, subject to the provisions of the Interest Reduction Act.

*Interest Reduction Act, 1931.*

As one of the financial measures arranged by the Premiers of the States and the Commonwealth for rehabilitating the economic position of Australia, the Interest Reduction Act, 1931, was passed by the Parliament of New South Wales to effect a reduction of  $22\frac{1}{2}$  per cent. in rates of interest on private debts created prior to the commencement of the Act. The Act applies to the Crown where the debtor is the Crown, but does not apply where the Crown is entitled to receive interest, in which case a maximum rate of 4 per cent. was established by the operation of the Finance Adjustment Act, 1932, described on page 69 of this Year Book. The Act provides that it may not have the effect of reducing the rate of interest on mortgages or hire purchase agreements below 5 per cent., the rate on mortgages to the Government Savings Bank on advances for homes from funds made available by the Commonwealth Savings Bank below  $5\frac{1}{2}$  per cent., or the rate payable under any debenture below 4 per cent. Where the rate of interest has been already reduced under the Moratorium Act, the reduction is taken into account in applying the provisions of this Act, and provision was made whereby creditors might apply to a court within three months of the commencement of the Act for an order modifying or excluding the operation of the reduction. Every reduction of interest made by the Act continues in force during the continuance of the obligation affected.

## OVERSEA EXCHANGE.

The relationship of Australian currency to that of the rest of the world is determined substantially by its value in relation to British currency and by the value of British currency relative to the currencies of the respective nations of the world. These relationships in turn are determined largely by the balance of international payments and by purchasing power parity, although, within limits, policy and other factors may have a modifying effect.

On 29th April, 1925, the Commonwealth Government withdrew the embargo on the export of gold, thus restoring the gold standard of exchange concurrently with Great Britain, and the exchange rates quoted by the Australian Banks were revised. The discount on English currency was substantially reduced, and in August, 1926, it went to par. Early in April, 1927, it went to a small premium, and rose progressively and steadily until towards the end of 1929, when a steep and unprecedented rise commenced, culminating in a premium of £30 per cent. in the telegraphic transfer buying rate at the end of January, 1931. The movement was due to the influence of a sudden shrinkage in the value of export commodities, a cessation of oversea borrowing and restrictions on the export of gold.

Toward the end of 1930 a scheme was formulated for the pooling of the London funds of the Australian banks for the purpose of meeting national interest obligations, and it was arranged by the trading banks and the Loan Council that the Governments should have first call upon the funds. Formerly it had been the practice of the Australian Governments to use loan moneys to pay interest accruing abroad and to apply an equivalent amount of revenue to loan expenditure in Australia.

Early in December, 1931, the Commonwealth Bank assumed the function of exchange control by undertaking to buy London exchanges at rates to be fixed by itself, without restriction so far as the public are concerned, and subject to certain conditions as regards surpluses accumulated by banking institutions. The premium was then reduced by £5 per cent. ...

The variations in the rates of exchange, Australia on London, since October, 1924, are shown below. The rates are the amount of discount or premium payable in Australian currency per £100 payable in British currency in London. Except where marked par or "p" to indicate premium, the rates are discounts.

Date.	Buying.				Selling.			
	T.T.	O.D.	30 days.	60 days.	T.T.	O.D.	30 days.	60 days.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1924—15 October ...	70 0	77 6	85 0	92 6	50 0	55 0	60 0	65 0
1925— 6 May ...	15 0	30 0	40 0	50 0	10 0	17 6	27 6	37 6
10 June ...	5 0	17 6	27 6	37 6	par.	7 6	15 0	22 6
4 December ..	5 0	20 0	30 0	40 0	par.	7 6	15 0	22 6
1926— 9 June ...	5 0	17 6	27 6	37 6	2 6p	5 0	12 6	20 0
12 July ...	2 6	15 0	25 0	35 0	5 0p	2 6	10 0	17 6
5 August ...	par.	12 6	22 6	32 6	7 6p	par.	7 6	15 0
1 October ...	5 0	17 6	27 6	37 6	2 6p	5 0	12 6	20 0
1927—20 April ...	2 6p	10 0	20 0	30 0	10 0p	2 6p	5 0	12 6
27 June ...	5 0p	7 6	17 6	27 6	12 6p	5 0p	2 6	10 0
25 July ...	7 6p	5 0	15 0	25 0	15 0p	7 6p	par.	7 6
7 Nov. ...	7 6p	7 6	17 6	27 6	15 0p	7 6p	par.	7 6
1928—19 March ...	10 0p	5 0	15 0	25 0	20 0p	12 6p	5 0p	2 6
4 October ...	10 0p	5 0	16 3	26 3	20 0p	12 6p	5 0p	2 6
1929—22 July ...	15 0p	par.	11 3	21 3	25 0p	17 6p	10 0p	2 6p
3 September..	20 0p	5 0p	6 3	16 3	30 0p	22 6p	15 0p	7 6p
10 October ...	25 0p	10 0p	2 6	13 9	35 0p	26 3p	17 6p	8 9p
18 December...	32 6p	17 6p	5 0p	6 3	42 6p	33 9p	25 0p	16 3p
1930—28 January	40 0p	25 0p	12 6p	1 3p	52 6p	43 9p	35 0p	26 3p
17 February...	50 0p	35 0p	22 6p	11 3p	62 6p	53 9p	45 0p	36 3p
10 March ...	70 0p	55 0p	42 6p	31 3p	82 6p	73 9p	65 0p	56 3p
24 March ...	122 6p	107 6p	95 0p	83 9p	130 0p	121 3p	112 6p	103 9p
9 October ...	170 0p	157 6p	148 9p	141 3p	180 0p	175 0p	165 0p	165 0p
1931— 6 January ...	302 6p	290 0p	281 3p	273 9p	310 0p	305 0p	300 0p	295 0p
13 " ...	360 0p	347 6p	338 9p	331 3p	367 6p	362 6p	357 6p	352 6p
17 " ...	500 0p	487 6p	478 9p	471 3p	510 0p	505 0p	500 0p	495 0p
28 " ...	600 0p	587 6p	578 9p	571 3p	610 0p	605 0p	600 0p	595 0p
3 December...	500 0p	487 6p	475 0p	463 9p	510 0p	505 0p	500 0p	495 0p
1932—12 March ...	500 0p	490 0p	480 0p	471 3p	510 0p	505 0p	500 0p	495 0p
19 " ...	500 0p	491 3p	482 6p	475 0p	510 0p	505 0p	500 0p	495 0p
23 April ...	500 0p	492 6p	485 0p	478 9p	510 0p	506 3p	502 6p	498 9p
14 May ...	500 0p	493 9p	487 6p	482 6p	510 0p	507 6p	505 0p	502 6p
2 July ...	500 0p	495 0p	490 0p	486 3p	510 0p	507 6p	505 0p	502 6p
1934—18 August ...	500 0p	493 9p	487 6p	482 6p	510 0p	507 6p	505 0p	502 6p
1935—12 January ...	500 0p	493 9p	487 6p	482 6p	510 0p	508 9p	506 3p	503 9p

\* Rate unchanged, August, 1937.

The foregoing rates are now usually quoted on the basis of the price in Australia (Australian currency) of £100 London (British currency). Thus, as from 3rd December, 1931, the banks were prepared to pay £125 Australian currency for a telegraphic transfer of the right to £100 in London (British currency), and to sell such a right for £125 10s. Australian currency. The margin between the buying and selling rates (10s. per £100) represents the bankers' commission. The margins for other usances include allowances for interest which were affected by the inauguration of the air mail service between Australia and London. Selling rates were raised on that account on 12th January, 1935, and the banks quote special buying rates for settlement by air mail,

### THE COMMONWEALTH BANK OF AUSTRALIA.

The Commonwealth Bank of Australia was established under an Act passed by the Federal Government in 1911, and since amended from time to time. The bank commenced operations on 15th July, 1912, by opening a savings bank department. Ordinary banking business was commenced on 20th January, 1913. The head office is in Sydney, and branches have been established in the principal cities and towns of Australia, in London, and in the territory of New Guinea.

The Commonwealth Government is responsible for the payment of all moneys due by the bank, and debts due to the bank by other banks have the same priority as debts due to the Commonwealth. The affairs of the bank are subject to inspection and audit by the Auditor-General of the Commonwealth. The bank is authorised to conduct general banking business, to exercise the functions of an ordinary bank of issue, and, with the approval of the Treasurer of the Commonwealth, it may take over the business of banking corporations. Since 1920 the control of the Australian note issue has been one of the functions of a separate department of the Commonwealth Bank. The Savings Bank Department was separated from the bank in June, 1928, but is still managed by the Commonwealth Bank. Further details regarding the Commonwealth Savings Bank thus established are stated on page 126.

#### *Central Reserve Bank.*

An amending Act, passed in 1924, made provision for extending the scope of the bank's operations with the object of facilitating its transition into a central reserve bank. In May, 1930, a further bill was introduced in the Parliament of the Commonwealth to set up a Central Reserve Bank to take over the central banking activities of the Commonwealth Bank. The Senate submitted this bill to a Select Committee for report, and it was not passed into law.

Following on consultation between the Directors of the Commonwealth Bank and the Comptroller of the Bank of England in the early part of 1927 discussions were initiated between the Commonwealth Bank and trading banks on the establishment of a central reserve system. Little practical result ensued until 1930, when the Commonwealth Bank reported that the trading banks were, to a much greater extent, treating the Commonwealth Bank as a central reserve bank and had substantially increased their deposits with it, partly as a result of the acquisition of gold by the Commonwealth Bank from the trading banks to meet the exchange crisis. In March, 1931, the Directors of the bank reported that it was in reality functioning as a central bank, and the function of exchange control was assumed in December, 1931, when the Commonwealth Bank undertook to buy London exchange at a stated price.

#### *Control.*

The Commonwealth Bank is controlled by a Board of Directors, composed of the Governor of the Bank, the Secretary of the Commonwealth Treasury, and six other directors with experience in agriculture, commerce, finance, or industry. The last-mentioned are appointed by the Governor-General for terms ranging, in the case of the first appointments, from two to seven years, so that one will retire in each year, but will be eligible for reappointment. Subsequent appointments will be for seven years. The Governor of the Bank is its chief executive officer and is appointed for a term of seven years, with eligibility for reappointment. The 1924 amendment to the Bank Act made provision for the appointment of a Board of Advice in London, but this has not yet been set up. A director or officer of any other bank may not be appointed as a director of the bank nor as a member of the London Board.

The Board of Directors may be authorised by proclamation to fix and publish the rate at which it will discount and rediscount bills of exchange. The settlement of balances between the banks trading in Australia is conducted by means of cheques drawn on the Commonwealth Bank, and for this purpose the other banks keep funds with the Commonwealth Bank.

#### *Capital and Profits.*

The capital of the Bank is limited to £20,000,000, consisting of £4,000,000 from accumulated profits, a sum not exceeding £6,000,000 which the Federal Treasurer is authorised to borrow, and such sum as may be raised by the sale and issue of debentures up to £10,000,000. The Bank will pay the interest on any loan raised for its purposes. It has not yet exercised its authority to issue debentures.

Of the net profits of the Bank—except those of the Note Issue and the Rural Credits Departments—half are payable to the Bank reserve fund and half to the National Debt Sinking Fund. Profits from the Note Issue Department are paid to the Commonwealth Treasury, though during the period 1925 to 1932, one quarter of the profits, totalling £2,000,000, was paid to the credit of the capital account of the Rural Credits Department. The aggregate profits to 30th June, 1936, excluding the Note Issue Department, amounted to £13,115,237, which have been distributed as follow:—General Bank, capital account, £4,000,000; and reserve fund, £2,240,570, Rural Credits Department reserve fund £262,373 and development fund, £262,373; Savings Banks reserve fund, £2,256,669; and National Debt sinking fund, £4,093,252.

#### *Rural Credits Department.*

The Rural Credits Department was established towards the end of 1925 to assist the marketing of products of the rural industries. This department may make advances upon the security of primary produce. Primary produce was defined to mean wool, grain, butter, cheese, fruits, hops, cotton, sugar, and any other produce as may be prescribed, and the list of commodities has been extended from time to time. The advance may not be for a period of more than one year. The advances may be made upon the security of primary produce to the general banking section of the Commonwealth Bank, to other banks, to co-operative associations, and to such other bodies as may be specified by proclamation. In lieu of making advances the department may discount bills secured upon primary produce on behalf of any of these institutions.

Capital for the Rural Credits Department amounting to £2,000,000 was provided from the profits of the note issue, as already indicated, and additional capital may be provided by loans from the Federal Government up to a limit of £3,000,000. The Commonwealth Bank may raise further funds for the department by issuing debentures up to an amount not exceeding the greater of the following, viz., (a) advances on primary produce outstanding at the date of the issue of the debentures; or (b) four times the sum of (i) outstanding loans to the department from the Federal Government, (ii) moneys received from the profits of the note issue, (iii) the credit balance of the Rural Credits Department Reserve Fund. The dates for the redemption of the debentures are to coincide, as nearly as practicable, with the dates for the repayment of the advances made. In addition, the general banking department of the Commonwealth Bank may make advances to the Rural Credits Department of such amounts and subject to such terms and conditions as the Board of Directors determines.

The assets of the Rural Credits Department are available, firstly, for meeting liabilities other than loans from the Federal Government and interest thereon; and secondly, for repaying such loans with interest.

One half of the net profits are payable to the reserve fund of the Department and one half to a fund, known as Development Fund, to be used, at the discretion of the Board of Directors, for the promotion of primary production. At 30th June, 1936, the credit balance of the Reserve Fund was £262,373 and of the Development Fund £36,448.

The following statement shows the average liabilities and assets of the Commonwealth Bank (including the Rural Credits Department) in New South Wales in the June quarter of each of the years 1933 to 1937.

Particulars.	June Quarter.				
	1933.	1934.	1935.	1936.	1937.
<b>Liabilities—</b>	£	£	£	£	£
Deposits at interest—					
Government ...	5,253	.....	2,769,231	5,000,000	3,538,461
Other ...	14,835,718	12,018,576	12,734,083	12,054,614	14,795,557
Deposits not bearing interest—					
Government ...	109,523	591,705	95,360	20,030	15,220
Other ...	2,943,746	3,602,011	5,559,663	5,449,059	7,647,843
Total deposits ...	17,894,240	16,212,292	21,158,337	22,523,703	25,997,081
Other liabilities ...	6,594,887	7,100,395	6,794,598	5,594,988	8,263,336
<b>Total Liabilities in New South Wales...</b>	<b>24,489,127</b>	<b>23,312,687</b>	<b>27,952,935</b>	<b>28,118,691</b>	<b>34,260,417</b>
<b>Assets—</b>					
Coin and Bullion ...	348,307	271,612	234,071	288,092	238,821
Australian Notes ...	1,570,322	1,812,297	1,345,449	1,294,914	1,206,198
Advances, etc. ...	3,766,513	3,591,845	4,075,277	5,493,902	6,638,418
Government Securities* ...	17,163,596	17,701,671	15,376,707	16,640,345	17,457,398
Landed Property ...	430,265	439,741	414,844	378,601	366,744
Notes, Bills and Balances from other Banks ...	68,015	64,635	72,759	87,614	80,081
<b>Total Assets in New South Wales ...</b>	<b>23,347,018</b>	<b>23,881,801</b>	<b>21,519,107</b>	<b>24,183,468</b>	<b>25,987,660</b>

\* Including municipal securities and short term loans to Governments.

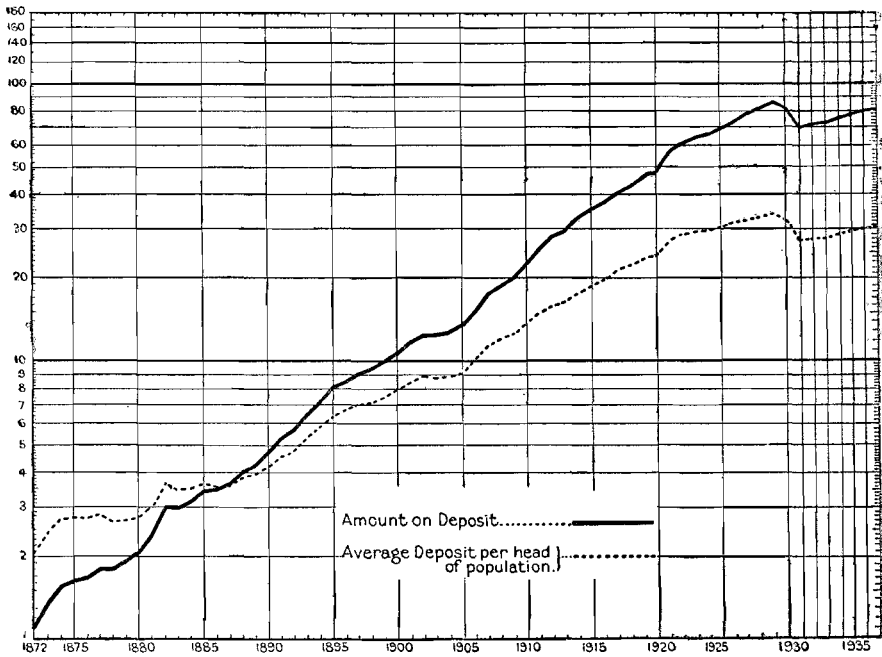
The liabilities classified as "other" in the table consist for the most part of amounts deposited with the Commonwealth Bank by the trading banks.

The balance-sheet totals of the bank in New South Wales and elsewhere at 30th June, 1913, amounted to £5,055,382. At 30th June, 1936, they were £89,329,630 in the General Bank and Rural Credits Departments, £55,403,654 in the Note Issue Department and £141,594,873 in the Savings Bank. Considerable advance in the totals has resulted from the development of central banking functions and mergers with State savings banks.

#### SAVINGS BANKS.

Savings bank business in New South Wales has been conducted solely by the Commonwealth Savings Bank of Australia as from 15th December, 1931. On this date the extensive savings bank business of the Government Savings Bank of New South Wales was merged with the Commonwealth Savings Bank and an undertaking was given by the Government of New South Wales not to engage in the future in the conduct of savings bank business. Extensive use is made of the facilities offered for the accumulation of small sums on which interest is paid.

**SAVINGS BANKS, 1872 to 1937.**  
(Ratio Graph.)



The numbers at the side of the graph represent £1,000,000 of deposits, and £1 of average deposit per head of population. The diagram is a ratio graph. The vertical scale is logarithmic, and each curve rises and falls according to the rate of increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

The following statement shows the operations on savings bank accounts and the amount of depositors' balances in New South Wales in various years. The figures for 1910 and earlier years do not include School Savings Bank accounts.

Year ended 30th June.	Savings Bank Deposits.					
	Amounts Credited.		Withdrawals.	Increase in Deposits.	Deposits at 30th June.	
	Deposits.	Interest.			Amount. †	Per Head.
	£	£	£	£	£	£ s. d.
1880*				153,594	2,075,856	2 17 0
1890*				450,380	4,730,469	4 5 10
1900*	5,035,006	304,882	4,507,940	831,948	10,901,382	8 2 8
1910*	15,343,561	619,263	13,658,533	2,304,291	22,453,924	13 14 2
1920	54,660,882	1,597,050	53,394,739	2,862,745	49,951,362	24 3 0
1925	67,573,577	2,387,636	66,973,835	2,975,316	69,149,433	30 3 2
1926	72,395,851	2,543,533	70,281,167	4,658,218	73,807,651	31 9 10
1927	76,345,393	2,701,016	74,502,327	4,544,082	78,351,733	32 12 4
1928	80,123,076	2,846,415	79,458,803	3,275,934	81,627,667	33 3 11
1929	81,941,134	3,051,191	80,847,878	4,099,847	85,727,514	34 5 1
1930	76,703,875	3,125,247	83,082,889	(—) 3,262,084	82,465,430	32 12 0
1931	58,179,625	2,799,637	73,652,380	(—) 12,654,661	69,810,769	27 6 6
1932	53,097,349	2,033,398	53,285,025	1,837,100	71,647,869	27 15 9
1933	41,631,943	1,720,183	42,819,614	659,816	72,307,685	27 16 0
1934	46,456,174	1,694,079	44,845,248	3,406,385	75,714,070	28 17 7
1935	48,940,461	1,512,914	48,461,611	2,192,332	77,906,402	29 9 2
1936	54,145,162	1,470,625	53,790,145	2,093,546	79,999,948	30 0 3
1937	57,144,148	1,490,459	57,151,507	1,952,451	81,952,399	30 8 9

\* Year ended 31st December.

† Includes amount of deposits in Schools Savings Banks in 1920 and later years.

(—) Decrease in Deposits

Deposits exceeded withdrawals in each year since 1919-20, except in 1923-24, when the excess of withdrawals was £473,239, and from 1930 to 1933. In 1929-30 and 1930-31 decreases in depositors' balances after the crediting of interest accompanied intensified depression conditions and preceded the closure of the State Savings Bank.

The amount of interest credited annually to depositors increased until 1930, under the influence of growing deposits, and, in 1928, the allowance of higher rates of interest. Successive reductions of interest rates since July, 1931, are reflected in the smaller amounts added to depositors' balances.

Accounts in active operation as at 30th June, 1932, and each succeeding year are shown below, together with the average amount of deposits per account. Comparable figures in respect of earlier years are not available.

30th June.	No. of Active Accounts.	Average Deposit per Account.
		£ s. d.
1932	1,013,017	70 14 6
1933	1,038,338	69 12 9
1934	1,082,016	69 19 6
1935	1,118,537	69 13 0
1936	1,163,713	68 14 11

The number of accounts does not represent individual depositors, as many of the accounts are joint accounts and accounts of societies, trusts, etc., whose members have personal accounts also. It is apparent, however, that a large proportion of the people practise thrift through the medium of the savings bank.

#### COMMONWEALTH SAVINGS BANK.

The Savings Bank Department of the Commonwealth Bank was opened on 15th July, 1912, and its business has been transacted at all branches of the Commonwealth Bank as well as at numerous post offices and agencies. As from 15th December, 1931, the business of the bank has been transacted also in former branches and agencies of the Government Savings Bank, which, as from that date, became offices of the Commonwealth Savings Bank. Legislation was passed in 1927 and proclaimed on 9th June, 1928, for the purpose of establishing this department of the Commonwealth Bank as a separate institution—the Commonwealth Savings Bank of Australia. It is controlled by the Board of the Commonwealth Bank, but the Act makes provision for the transfer of control to a separate commission consisting of a chief commissioner and two other commissioners after a resolution has been passed in both Houses of the Federal Parliament. Its funds are available for long-term investments, *e.g.*, loans on the security of land, advances for homes or for warehouses and stores for primary products, in debentures of the Rural Credits Department of the Commonwealth Bank and on fixed deposits with the Commonwealth Bank. One member of the Savings Bank Commission, when appointed, is to be a director of the Commonwealth Bank nominated by the Board of Directors. This will facilitate co-operation between the two institutions and enable the Commission to obtain the advice of the Board of Directors regarding the investment of the Savings Bank funds.

Deposits are received in sums of one shilling or more, and interest is allowed on the minimum monthly balances at the rate of 2 per cent. per annum up to £500, and at 1½ per cent. on an additional amount up to £1,300 on personal accounts, and at the rate of 2 per cent. per annum on the whole credit balance of bodies such as friendly societies not operating for profit. Recent changes in the rates of interest allowed are shown on page 118.

The total liabilities and assets of the Commonwealth Savings Bank at 30th June, 1936, amounted to £141,594,873. The liabilities included reserve fund £2,256,669, and depositors' balances £133,831,854. The assets consisted largely of Government securities £89,785,654 and securities of municipalities and other public authorities £32,695,779; coin, cash and money at short call amounted to £14,828,553, representing a proportion of 11 per cent. of depositors' balances, bank premises to £1,007,671 and other assets to £3,277,216.

#### THE RURAL BANK OF NEW SOUTH WALES.

Particulars of the foundation and changes in the constitution of the Rural Bank of New South Wales have been stated in earlier issues of the Year Book.

Prior to 1st July, 1933, the bank functioned under the name of the Government Savings Bank of New South Wales, although the Savings Bank Department ceased active business on its amalgamation with the Commonwealth Savings Bank of Australia as from 15th December, 1931. The amalgamation was an outcome of the suspension of payments by the Government Savings Bank on 23rd of April, 1931, and the agreements under which it was effected provided also for the transfer of deposits in the Rural Bank Department to the Commonwealth Bank of Australia.

The business of the Rural Bank is now conducted in two departments, viz., the Rural Bank Department and Advances for Homes Department, and in a Government Agency Department the Bank administers various lending activities on behalf of the Government. Control of the Bank is exercised by three commissioners, of whom one is president, appointed during ability and good behaviour until attainment of the age of sixty-five years.

#### *Rural Bank Department.*

An account of the origin and operations of the Rural Bank Department is given in the chapter "Rural Settlement" of this *Year Book*.

Prior to 1931 the Department obtained the bulk of its funds from customers' deposits on both fixed and current account. A substantial sum was obtained also on loan from the Savings Bank Department, and a public issue of approximately £1,000,000 was made in 1923. On 15th December, 1931, Rural Bank stock was issued to the Commonwealth Bank as consideration for the assumption of deposit liabilities by that institution, and a further issue was made to the Commonwealth Savings Bank in place of loans due previously to the Savings Bank Department. As from this date the Rural Bank Department functioned only in so far as loan accounts were concerned until 28th November, 1933, when deposit business was resumed on the opening of a branch in Sydney. At 30th June, 1936, thirty-seven branches had been opened in Sydney and important country centres, while in other localities branches of the Commonwealth Bank, acting as agents in certain cases, provide banking facilities for the Department's customers.

The balance-sheet of the Rural Bank Department as at 30th June, 1936, was:—

<i>Liabilities</i>		<i>Assets.</i>	
	£		£
Rural Bank Department		Cash and Bank Balances ...	509,369
Stock and Debentures ...	13,992,893	Investments—	
Reserve Fund ...	694,278	Commonwealth Government	
Special Reserve ...	613,450	Securities... ..	542,903
Deposits, Other Liabilities and		Fixed Deposits ... ..	77,379
Reserves for Contingencies	1,478,459	Other Securities ... ..	300
Government Agency Dept.—		Reserve Fund Investments—	
Capital Accounts ...	120,180	Commonwealth Govern-	
Guarantee and Other Funds	79,986	ment Securities ... ..	598,339
		Metropolitan Water Board	
		Securities ... ..	60,083
		Loans and Advances to	
		Customers ... ..	14,562,768
		Sundry Debtors and other	
		Assets ... ..	171,657
		Due by other Departments	14,134
		Premises ... ..	442,314
Total ... ..	16,979,246	Total ... ..	16,979,246

The assets and liabilities shown above, other than capital items, are included in the particulars of trading banks published on pages 103 and 104.

The net profit for the year was £31,015, which was transferred to the reserve fund.

In terms of the agreement under which the Savings Bank Department and Commonwealth Savings Bank amalgamated, one-half of the profits earned in New South Wales by the Commonwealth Savings Bank is payable to the Commissioners of the Rural Bank. Amounts received in this manner are credited direct to a special reserve account of the Rural Bank Department, which, at 30th June, 1936, totalled £613,450. The share of profits received in respect of the half-year ended 31st December, 1935, amounted to £85,275.

#### *Advances for Homes Department.*

An account of the operations of the Advances for Homes Department appears in the chapter "Social Condition," of this Year Book.

Funds for the purposes of the Department were obtained mainly by loan from the Savings Bank Department, but liability in this respect is now owing to the Commonwealth Savings Bank. A public loan of approximately £1,000,000 was floated in 1924, and in the latter part of 1928 arrangements were made to authorise the Commissioners to obtain advances from the Housing Fund constituted by the Commonwealth Government, and the sum of nearly £1,000,000 was made available. In April, 1934, a loan of £1,511,780 was raised by public subscription to provide for the redemption of the £1,000,000 loan floated in 1924, and to enable the resumption of lending operations. Further loans have since been arranged with the Commonwealth Savings Bank.

The balance-sheet of the Advances for Homes Department at 30th June, 1936, was as follows:—

Liabilities.				Assets.			
£				£			
Advances for Homes Department	Stock	and	Debentures	Cash at Bankers	...	...	211,692
...	...	...	12,062,921	Reserve Fund Investments—	Commonwealth	Government	
Reserve Fund	...	...	719,312	Securities	...	...	622,276
Deposits, other	Liabilities	and		Metropolitan Water Board	Securities	...	60,083
Reserves for Contingencies	...	...	843,499	Commonwealth Government	Securities	...	73,979
Amounts due to Other	Departments	...	15,592	Sundry Debtors	...	...	97
				Loans on Mortgage and Con-	tracts of Sale	...	12,673,197
Total	...		£13,641,324	Total	...		£13,641,324

The net profit in 1935-36 was £32,667, which was transferred to the reserve fund.

#### *Government Agency Department.*

A Government Agency Department was established under the Rural Bank Act, 1932, but the scope of its functions and powers was not defined till the passage of the Rural Bank (Agency) Act, 1934. Under the latter Act eight agencies were created within the department. Two, comprising the Building Relief and Advances to Settlers Agencies, deal with moneys advanced through the Unemployment Relief Council. A second group of six agencies, embracing agencies for Farmers' Relief, Government Guarantee, Government Housing, Home Building Scheme, Irrigation and Rural Industries, relate to various advances made from time to time through different Government departments. In respect of all such agencies the Rural Bank acts in an administrative capacity as agent for the Government. The costs of administering the agencies are payable to the Bank from Consolidated Revenue Fund and revenue earnings are payable to the Treasurer as and when available. Collections on account of principal sums due by borrowers may be retained for the purpose of making further advances. The various agencies were transferred to the Rural Bank as follow: Government Housing and Home Building, which had been previously conducted by the Bank, on 28th December, 1934; The Farmers' Relief on 1st March, 1935; the remaining group of five agencies on 1st July, 1935. By an amending Act passed in December, 1936, a Closer Settlement Agency was created to assist borrowers from the Rural Bank Department in the purchase of land which forms part of a subdivision effected for the purpose of promoting closer settlement. The operations within the

Government Agency Department during the year ended 30th June, 1936, are summarised in the following table:—

Agency.	Revenue Collections.	Administrative Expenses.	Repayment of Loans and Advances.	Balances Outstanding on Advances etc. current at 30 June, 1936.
Group 1—	£	£	£	£
Building Relief ...	10,838	15,156	153,288	444,472
Advances to Settlers ...	21,740	16,240	60,712	970,953
Group 2—				
Farmers' Relief ...	21,594	28,249	416,114	700,461
Government Guarantee .....		214	.....	3,286
Government Housing ...	19,014	1,883	16,785	460,778
Home Building Scheme ...	6,729	3,428	14,626	227,981
Irrigation... ..	201,061	27,359	95,487	1,648,545
Rural Industries ...	9,817	24,412	45,661	1,119,388
Total ...	290,793	116,941	802,673	5,575,864

It is not possible from the figures in the foregoing table to calculate the net profit or loss of the various agencies, as a charge is not made for interest on capital resources used in making loans and advances.

#### DEPOSITS IN ALL BANKS IN NEW SOUTH WALES.

In June, 1936, the net amount of deposits at credit of private and public accounts in the savings and the trading banks in New South Wales was £202,564,537, or £75 19s. 11d. per head of population, after deducting from the combined totals amounts deposited with trading banks by savings banks. The figures for the savings banks in the following table represent the deposits as at 30th June in each year, and those for the trading banks are the averages of the June quarter:—

June.	Net Deposits bearing Interest.			Net Deposits not bearing Interest.*	All Deposits.*	
	Savings Banks.	Trading Banks.*	Total.		Total.	Per head of Population.
	£	£	£	£	£	£ s. d.
1925	69,149,433	48,628,465	117,777,898	54,446,766+	172,224,664	75 2 3
1926	73,807,651	52,148,006	125,955,657	58,135,332	184,090,989	78 10 11
1927	78,351,733	55,888,031	134,239,764	55,064,313	189,304,077	78 16 2
1928	81,627,667	63,483,867	145,111,534	54,018,990	199,130,524	80 19 7
1929	85,727,514	67,211,856	152,939,370	55,099,134	208,038,504	83 2 5
1930	82,465,430	73,599,636	155,975,066	47,161,221	203,136,287	80 6 0
1931	69,810,769	77,794,555	147,605,324	40,880,879	188,486,203	73 15 7
1932	71,647,869	70,105,231	141,753,100	41,066,823	182,819,923	70 18 1
1933	72,307,685	73,100,353	145,408,038	39,849,683	185,257,721	71 4 5
1934	75,714,070	75,127,561	150,841,634	46,426,456	197,268,090	75 4 9
1935	77,908,102	74,864,308	152,770,710	49,941,189	202,711,899	76 12 11
1936	79,939,948	73,175,165	153,175,113	43,389,424	202,564,537	75 19 11

\* Excluding deposits lodged by Savings Banks in Trading Banks.

The amounts of interest-bearing deposits in the trading banks as shown above differ from the figures in preceding tables, which include the savings deposits in the Commonwealth Bank up to 1928 inclusive and the deposits of the savings banks in the trading banks.

## INCORPORATED COMPANIES.

The legislation affecting the formation and conduct of companies in New South Wales is contained in the Companies Act, 1936, which superseded and amended the Principal Act of 1899, and various amendments, as from 1st January, 1937.

The formation of a company, association, or partnership of more than ten persons in a banking business, or of twenty in any other business trading for profit, is prohibited, unless it is registered under the Companies Act, or incorporated under some other enactment, by royal charter or by letters patent.

Not less than seven persons may associate to form an incorporated company except that in a proprietary company the minimum number is two.

Companies may be of four kinds according to the liability of members to contribute to capital or to assets in the event of winding-up. They may be limited liability companies with the liability of members limited (1) to the amount unpaid on shares or (2) by guarantee, or they may be unlimited companies, in which case the liability of members is unlimited, or no liability companies in which calls made on shares are not enforceable against members. No-liability companies may be formed only in connection with mining operations and shares on which calls are unpaid for twenty-one days are forfeited automatically. Companies with liability limited by shares and not being no-liability companies may be registered as proprietary companies under conditions which restrict the rights of members to transfer shares, limit membership and prohibit the sale of shares and raising of loans by public subscription.

All companies are required to appoint auditors and to prepare in every year accounts and a balance-sheet showing prescribed information. Annual returns must be filed with the Registrar-General, including a copy of the balance-sheet and auditor's report (except in a proprietary company) and, in the case of a company with capital divided into shares, a list of shareholders and a summary of capital.

Particulars relating to the registration of new companies in New South Wales and of increases of capital are shown below, the figures for the quinquennial periods representing the annual average:—

Period.	Limited Companies.				No-Liability Mining Companies.			
	New Companies.		Increases of Capital.		New Companies.		Increases of Capital.	
	No.	Nominal Capital.	No.	Nominal Amount.	No.	Nominal Capital.	No.	Nominal Amount.
		£		£		£		£
*1901-05 ...	113	3,104,766	13	483,990	25	301,766	5	24,175
*1906-10 ...	231	5,184,658	23	1,010,710	45	430,112	7	29,634
*1911-15 ...	383	10,263,455	58	3,468,139	20	308,017	3	31,395
*1916-20 ...	321	17,465,293	93	3,624,272	14	284,271	1	11,400
*1921-25 ...	528	16,940,799	94	5,585,987	16	273,350	3	16,690
*1926-30 ...	709	33,316,333	96	9,164,442	21	677,630	1	3,200
*1931-35 ...	604	12,618,552	46	3,822,380	28	840,915	1	25,700
1929 ...	737	36,063,240	90	7,038,800	33	1,599,650	3	9,000
1931 ...	447†	10,678,450†	29	1,208,700	11	93,800	1	50,000
1932 ...	502	12,325,906	20	701,658	24	871,800	...	...
1933 ...	622	9,004,850	37	1,178,500	25	546,000	1	25,000
1934 ...	715	13,745,084	63	10,502,934	61	2,303,475	4	41,000
1935 ...	734	17,338,471	80	5,520,109	19	389,500	1	12,500
1936 ...	795	16,933,290	85	6,289,926	6	27,000	3	28,750

\* Average per annum.

† Excluding two ephemeral companies, capital £112,000,000.

The total number of limited companies which appeared to be in active existence in New South Wales at the end of various years since 1925 was as follows:—

End of Year.			Companies.		End of Year.			Companies.	
			Local.	Foreign.				Local.	Foreign.
1925	...	...	No. 4,967	No. 842	1933	...	...	No. 6,029	No. 922
1929	...	...	6,044	935	1934	...	...	6,295	947
1931	...	...	5,587	900	1935	...	...	6,589	978
1932	...	...	5,750	902	1936	...	...	7,234	974

Between 1901 and 1915 there was a steady increase in the promotion of limited companies, principally joint-stock companies, and a large amount of capital was invested in the expansion of existing enterprises, especially in the years immediately preceding the outbreak of the war. In 1915 and 1916 there was a noticeable slackening, and regulations under the War Precautions Act prohibited the issue or subscription of fresh capital unless under permit, the object being to encourage the flow of capital into loans for war purposes. After 1917 the number of registrations began to rise again, as industrial and commercial enterprises prospered in consequence of war expenditure and over 800 companies with nominal capital amounting to £16,700,000 were registered in 1920.

The figures for the years 1926 to 1929 were on a high level, and the aggregate capital was unusually large in 1926 and 1928. The companies registered in 1926, viz., 695 with nominal capital of £42,731,310, included a number with very large capital, *e.g.*, one with £5,000,000 and five with £1,000,000 or more. In 1928 the registrations included two companies with nominal capital of £5,000,000 and six others with £1,000,000 or over.

Industrial and commercial depression was apparent in a greatly decreased volume of registrations in the years 1930 to 1933, and the subsequent recovery of business activity was reflected in the increased registrations of later years. Increases of capital in 1934 included one amount of £7,000,000 and one of £1,500,000, the former being made to provide for an issue of shares to cover capitalisation of reserves. In 1935 the increase in the case of one company amounted to £2,404,444. Activity in the gold mining industry, fostered by the high premium payable on gold, was reflected in the registration of no-liability mining companies.

During the period 1911 to 1920 the number of foreign companies (*i.e.*, those with original registration outside New South Wales) registered was, on an average, about 56 per annum. The number registered in each of the past twelve year was as follows:—

Year	No.	Year	No.	Year	No.
1925	78	1929	74	1933	58
1926	83	1930	54	1934	55
1927	69	1931	38	1935	61
1928	81	1932	55	1936	77

#### STOCK EXCHANGE INDEX.

The following index of prices of company shares on the Sydney Stock Exchange is based on the ratio of prices to par value of ordinary shares. The prices represent the average values for the respective months, and are based on records of actual sales or, where no sales have taken place, on a valuation determined from previous sales, current quotations, etc. In addition to the indexes for component groups and the total index for 75 companies, an index has been compiled in respect of 34 companies in whose shares there is a considerable volume of business. The indexes

are unweighted, the par value of shares being taken as base (100). Adjustments have been made to provide for the effects of capital reductions and capitalisations of reserves:—

Average for year or month.	23 Manu- facturing and Distribu- ting Companies.	10 Retail Companies.	8 Public Utility Companies.	5 Pastoral and Finance Companies.	5 Insurance Companies.	Total, 75 Companies.	34 Active Shares included in foregoing.
1928 ...	158.6	176.6	126.6	172.9	218.8	163.8	160.7
1929—							
April ...	179.3	183.8	129.4	174.1	243.5	174.4	172.6
July ...	178.8	172.9	129.9	158.8	231.6	169.4	168.8
December ...	154.4	142.7	124.0	120.5	198.6	146.4	144.0
1930—							
July ...	112.5	102.8	109.6	87.9	172.6	112.6	111.2
December ...	86.7	76.0	96.1	65.8	145.3	88.0	89.8
1931—							
July ...	77.3	65.9	90.8	79.3	119.0	79.5	83.5
September...	72.3	60.2	87.9	75.2	121.3	74.4	77.2
December ...	92.6	74.5	98.5	95.4	153.7	91.5	98.6
1932—							
July ...	100.0	78.0	112.1	94.9	152.0	95.3	102.1
December ...	114.0	90.8	132.6	102.9	167.8	107.5	115.2
1933—							
July ...	130.8	102.9	139.6	124.3	182.5	121.3	129.0
December...	139.3	120.3	143.3	145.6	199.3	132.4	139.5
1934—							
July ...	147.0	134.1	159.6	142.6	222.5	142.3	147.4
December ...	169.7	155.7	173.4	139.1	249.3	159.0	164.8
1935—							
January ...	171.2	160.1	176.9	139.8	264.7	162.2	167.1
February ...	166.1	155.1	173.5	133.7	265.9	158.5	162.0
March ...	162.2	152.3	170.1	126.7	259.3	154.4	157.4
April ...	161.7	154.5	170.4	131.8	261.3	155.1	158.5
May ...	168.1	156.2	176.7	136.4	262.0	159.1	164.3
June ...	172.8	159.5	181.7	136.2	264.3	162.4	167.8
July ...	178.3	166.0	185.2	139.9	273.2	167.7	173.5
August ...	182.6	170.3	186.2	147.2	283.3	171.7	178.8
September...	178.0	168.5	180.4	140.8	279.6	167.9	174.8
October ...	176.6	165.4	178.8	137.2	274.9	165.9	172.4
November ...	184.6	168.8	179.9	139.0	270.8	169.2	176.9
December...	183.7	171.6	182.3	140.2	270.4	169.2	176.4
1936—							
January ...	187.4	177.2	186.0	145.2	272.8	172.9	181.5
February ...	189.8	177.5	189.8	148.8	275.3	175.2	184.5
March ...	185.8	176.0	182.6	146.7	272.4	172.0	180.6
April ...	184.6	174.9	178.2	145.2	273.3	170.5	178.5
May ...	186.8	177.8	178.1	145.1	273.7	171.3	180.0
June ...	190.7	187.0	180.0	141.5	279.6	175.3	184.0
July ...	194.9	193.1	182.4	143.8	280.0	178.4	186.8
August ...	195.3	196.2	175.8	148.0	278.4	178.0	186.2
September..	198.2	198.3	175.8	151.1	278.2	179.2	187.0
October ...	202.3	199.7	179.1	150.2	285.9	182.0	190.5
November...	207.9	200.1	178.2	158.6	288.2	186.1	194.2
December...	204.6	200.6	175.1	157.8	284.6	184.5	191.6
1937—							
January ...	210.1	202.4	179.6	166.2	285.0	188.7	197.5
February ...	213.8	203.4	182.1	168.8	284.6	190.4	200.1
March ...	213.8	203.8	181.0	169.2	281.2	190.4	200.5
April ...	211.1	199.7	179.7	171.9	280.4	188.7	198.5
May ...	210.8	197.5	180.1	173.2	279.8	187.8	198.1
June ...	211.4	193.0	180.2	170.7	278.4	186.6	196.8

The highest point of the index prior to the depression was in April, 1929, and the lowest point during the depression was in September, 1931.

Monthly averages, from July, 1929, to December, 1934, were published in earlier issues of the Year Book, and the indexes for current months are published in the "Monthly Summary of Business Statistics."

#### CO-OPERATIVE SOCIETIES.

The laws relating to co-operation in New South Wales are embodied in the Co-operation Act, 1923-36.

The Act is a comprehensive measure, affording ample scope for co-operative development. It authorises co-operative societies to engage in all forms of economic activity except banking and insurance.

Societies may be of various kinds, viz.: (a) rural societies to assist producers in conducting their operations and in marketing products; (b) trading societies to carry on business, trade, or industry; (c) community settlement societies to acquire land and settle or retain persons thereon and to provide any common service or benefits; (d) community advancement societies to provide any community service, *e.g.*, water, gas, electricity, transport, recreation, etc.; (e) building societies—terminating or permanent—to assist members to acquire homes or other property; (f) rural credit societies to make or arrange loans to members for the purpose of assisting rural production; (g) urban credit societies to assist members to acquire plant, furniture, etc., or to commence business or trade; (h) investment societies to enable members to combine to secure shares in a company or business or to invest in securities. Societies of the same kind may combine into co-operative associations, and such associations of all kinds may form unions.

Societies are corporate bodies with limited liability except that a rural credit society may be formed with unlimited liability. Co-operative companies registered as limited companies under the Companies Act are permitted to transfer their registration to the Co-operation Act, without winding up or loss of identity, and societies registered under the Co-operation Act similarly may transfer their registration to the Companies Act. The use of the words "building society" or "co-operative" by any company not specially authorised in that regard or by any person or firm as part of a trade or business name is prohibited, and such bodies may not in any manner hold out that their trade or business is co-operative.

Adequate provision is made to safeguard the funds and financial interests of the societies, the issue of shares and the disposition of the funds are regulated, the power to raise loans and to receive deposits is limited, reserve funds must be established, and the accounts of the societies are subject to inspection and audit. A member may not hold more than one-fifth of the shares. No dividend may be paid in respect of shares in a rural credit society with unlimited liability, and in other cases the maximum rate of dividend is 8 per cent. per annum. Powers of supervision are vested in the Registrar, who registers the societies and their rules, adjudicates upon matters in dispute, and may inspect accounts if necessary.

An Advisory Council has been appointed to submit recommendations to the Minister with respect to regulations and model rules of co-operative societies, the appointment of committees, and other action for promoting co-operation. The Council consists of the Registrar and of persons appointed by the Governor to represent different forms of co-operative enterprise.

Co-operative effort for production is a prominent feature of the dairying industry, most of the butter factories being organised on a co-operative basis.

The following table shows particulars relating to various classes of co-operative societies, other than building societies, in the year 1935-36.

Type of Society.	Number at 30th June, 1936.	Number of Members.	Amount of Share Capital Paid-up.	Surplus and Reserves.
			£	£
Rural ... ..	138	50,565	980,346	869,141
Trading ... ..	76	34,909	491,272	361,888
Community Advancement ... ..	24	1,210	4,138	5,825
Investment ... ..	3	652	14,984	1,478
Total ... ..	241	87,336	1,490,740	1,238,332

There were also at 30th June, 1936, six associations of co-operative societies. One was comprised by twenty-two co-operative trading societies, with a share capital of £94,161, and reserves and undistributed surplus amounting to £62,817. Two are acting as marketing agents for groups of rural societies engaged in the fruit-growing industry, and one of the groups has formed a separate association, consisting of four members, to operate a wine distillery. An association of Starr-Bowkett societies consists of forty-nine members, while an association formed by a group of butter factories did not function and is now in course of liquidation.

Further details regarding the co-operative movement are set forth in the chapters of this Year Book relating to agriculture and the dairying industry.

#### *Trading Societies.*

The transactions of co-operative trading societies during 1929-30 and the last five years are given in the following table:—

Particulars.	1929-30	1931-32.	1932-33.	1933-34.	1934-35.	1935-36
Number of Societies	64	70	76	72	74	76
„ Returns	47	48	53	53	49	46
Number of Members	59,019	41,845	40,511	39,992	38,909	34,909
Liabilities—	£	£	£	£	£	£
Share Capital ..	1,016,778	630,820	627,242	612,693	545,551	491,272
Reserves and Net Profits ... ..	432,544	325,867	311,945	305,715	313,308	361,888
Other Liabilities...	692,842	448,547	419,557	365,667	363,006	305,834
Total Liabilities £	2,132,164	1,405,234	1,358,744	1,284,075	1,221,865	1,158,994
Assets—						
Freehold, Plant, etc. ... ..	1,072,568	546,482	529,650	480,588	476,126	435,883
Stock ... ..	507,616	337,034	305,616	283,208	294,617	297,617
Other Assets ...	551,980	521,718	523,478	520,279	451,122	425,494
Total Assets £	2,132,164	1,405,234	1,358,744	1,284,075	1,221,865	1,158,994
Sales, etc. ... ..	3,553,038	2,055,464	1,799,499	1,738,603	1,884,002	1,953,585

The liquidation of the largest trading society in the State caused the figures to decline sharply in 1930-31. Further decline up to 1933-34 and subsequent small increase of turnover were due in small measure to liquidations but chiefly to the fact that the mining industry, in centres of which a number of large societies operate, failed to participate to any great extent in general economic recovery.

The trading societies are mainly consumers' distributive societies organised on the Rochdale plan of "dividend upon purchase," conducting retail stores. They buy their supplies largely from a wholesale co-operative society with which a considerable number of them are affiliated. The societies have met with success in the Newcastle and other mining districts, and to a limited extent in other centres where large numbers of industrial workers reside.

#### *Rural Societies.*

There were 138 rural societies at 30th June, 1936. Their objects covered a variety of activities, including the manufacture and distribution of butter, cheese and bacon, the packing and marketing of fruit, and the purchase of poultry feed or general requisites.

A statement of the liabilities, assets and sales of these societies in years since 1929-30 is shown below.

Particulars.	1929-30.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
<b>Societies—</b>						
Number at 30th June	115	119	125	132	136	133
Returns received ...	92	102	103	112	110	108
Members ...	38,498	44,904	46,970	47,420	49,063	50,565
<b>Liabilities—</b>						
	£	£	£	£	£	£
Share Capital ...	834,816	906,029	925,473	956,091	967,008	980,346
Surplus and Reserves	643,826	718,380	730,134	781,612	829,420	869,141
Other liabilities ...	1,733,067	1,483,682	1,422,924	1,586,788	1,511,718	1,992,981
Total Liabilities ...	3,211,709	3,108,091	3,078,531	3,324,491	3,308,146	3,842,468
<b>Assets—</b>						
Land, Buildings, Plant, etc. ...	1,645,412	1,716,488	1,728,245	1,759,247	1,826,186	1,865,465
Stock ...	528,638	390,346	383,070	421,631	421,081	647,564
Other Assets ...	1,037,659	1,001,257	967,216	1,143,613	1,060,879	1,329,439
Total Assets ...	3,211,709	3,108,091	3,078,531	3,324,491	3,308,146	3,842,468
Sales, etc. ...	14,769,572	12,636,524	11,679,129	12,353,961	12,672,791	12,980,739

#### *Investment Societies.*

There are three investment societies, formed by the employees of each of the following bodies, viz., Australian Gas Light Company, North Shore Gas Company, and the Taronga Park Trust. Share capital amounted to £14,984, other funds to £1,478, and external liabilities to £217. Shares in companies and Government securities were valued at £15,840.

*Permanent Building Societies.*

The aggregate liabilities and assets of permanent building societies in the last five years are shown in the following statement:—

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of Societies ...	7	7	7	7	7
Liabilities—	£	£	£	£	£
Share Capital ...	501,678	495,418	485,889	479,434	490,915
Reserves and net profits	331,717	330,251	332,469	345,413	351,215
Deposits ...	597,170	558,496	558,165	544,251	565,648
Other Liabilities ...	24,549	25,699	19,131	20,106	25,964
Total Liabilities ...	1,455,114	1,409,864	1,395,654	1,389,204	1,434,742
Assets—					
Advances ...	1,175,608	1,106,993	1,051,074	1,034,960	1,096,923
Other Assets ...	279,506	302,871	344,580	354,244	337,819
Total Assets ...	1,455,114	1,409,864	1,395,654	1,389,204	1,434,742

The income amounted to £85,124 in 1934-35 and to £87,421 in 1935-36, while expenditure was £48,937 and £49,150, respectively. Net income decreased from £65,130 in 1929-30 to £31,428 in 1933-34, and was £39,271 in 1935-36.

*Starr-Bowkett and other Terminating Building Societies.*

Starr-Bowkett building societies are terminating societies, in which the rights of members to appropriation are determined by ballot or by sale. The usual procedure is that the member pays a subscription of 6d. per share per week for 15 years, or in some cases until the last appropriation is made, and is entitled to a loan of £50 in respect of each share held by him. Loans are repayable by instalments spread over 10 to 12½ years without interest. The duration of societies varies, but frequently over 20 years elapse before the last loan is made. When an advance has been made to all members remaining in the society the process of winding-up commences and share capital is repaid as repayments in respect of loans accumulate. The lifetime of a society of this type often extends to about 28 years. Particulars relating to their operations during the last five years are shown below:—

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of Societies ...	145	145	142	135	135
Number of Returns ...	129	117	112	105	89
Liabilities—	£	£	£	£	£
To Members ...	2,187,852	2,064,070	1,926,718	1,803,458	1,699,011
Surplus ...	361,875	357,010	316,089	296,296	279,292
Other Liabilities ...	50,421	44,143	42,623	45,551	44,564
Total ...	2,600,148	2,465,223	2,285,430	2,145,305	2,022,867
Assets—					
Advances ...	2,207,111	2,095,111	1,971,925	1,872,531	1,769,899
Other Assets ...	393,037	370,112	313,505	272,774	252,968
Total ...	2,600,148	2,465,223	2,285,430	2,145,305	2,022,867

Subscriptions received from shareholders in 1934-35 amounted to £111,706, and the withdrawals to £171,935; the advances on mortgage amounted to £259,750, and repayments to £326,364, and the sum due on account of advances at the end of the year was £1,872,531. The income during the year amounted to £38,665, and the expenses to £27,381.

In 1935-36 subscriptions amounted to £106,296, withdrawals were £106,280, advances £275,038, repayments £294,605, income £38,450, and expenses £24,097.

Besides the Starr-Bowkett building societies there is another class of terminating building societies which work principally on a bank overdraft, and loans are made available to members practically as soon as they require them, the ballot being very rarely resorted to. A member receiving a loan does not repay the actual amount borrowed, but is required to pay an increased rate of contribution for the remainder of the life of the society, consequently a balance-sheet in the usual sense of the term cannot be prepared. Although a maximum period of twelve years is fixed as the life of the society, it is usual to wind up before the expiration of the theoretical time.

Measures were incorporated in the Housing Improvement Act, 1936, to promote home building through the agency of societies of this character. A Co-operative Building Advisory Committee was set up to facilitate the formation and operations of societies and the Government was empowered to indemnify societies in respect of losses directly attributable to that portion of loans in excess of 80 per cent. and up to 90 per cent. of the value of securities. The indemnity may be given only in respect of loans not exceeding £750 where the borrower is to occupy the dwelling provided and liability attaching thereto may not at any time exceed £500,000 in the aggregate.

There were ten such societies in existence at 30th June, 1936; one was in process of liquidation and three were new societies registered during 1935-36. The following statement shows particulars of the transactions of these societies:—

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36
Number of Societies ... ..	6	7	6	7	10
Number of Returns ... ..	6	6	5	4	8
Receipts—					
Subscriptions from Members ...	£ 21,481	19,874	16,814	20,363	24,904
Fines and other Charges ...	£ 576	676	411	729	1,086
Interest received from borrowers	£ 1,441	1,429	560	*13,501	*10,281
Expenditure—					
Advances to members ... ..	£ 12,610	21,020	20,740	21,300	89,146
Withdrawals of share capital ...	£ 12,076	5,842	1,347	2,123	2,076
Interest paid by society ... ..	£ 3,267	2,687	2,954	1,434	2,041
Management Expenses ... ..	£ 1,713	1,839	1,488	1,628	2,449
Number of shares at end of year ...	8,469	8,248	7,421	8,370	12,335

\* Repayments and Premiums

#### FRIENDLY SOCIETIES.

The affairs of the friendly societies in New South Wales are conducted in accordance with the Friendly Societies Act of 1912 and its amendments. The societies are compelled to register, and are required to furnish periodical returns to the Registrar, giving details relating to membership, sickness, mortality, benefits, and finances. In this chapter finances only are discussed, and the figures in the following tables relate to the societies

which provide benefits such as medical attendance, sick pay, and funeral donations, and are exclusive of the particulars of miscellaneous societies registered under the Friendly Societies Act, such as dispensaries, medical institutes, and accident societies. Other matters relating to friendly societies are discussed in the chapter entitled "Social Condition."

Early legislation did not make adequate provision for maintaining the solvency of the friendly societies, but in 1899 an Act was passed to bring their affairs under State supervision and to make provision for the actuarial certification of tables of contributions, for valuations at least once within five years, the investigation of accounts, and other measures for safeguarding the funds. Under an amending Act passed in 1935, a society is not entitled to registration unless tables of contribution in respect of sickness and death benefits and policies of endowment are supported by an actuarial certificate.

As a general rule, the moneys received or paid on account of a particular benefit must be kept in a separate account and be used only for the specific purpose. It is provided, however, that where the sickness and funeral funds of a society are administered by one central body for the whole society they may be treated as one fund, and on valuation being made the Registrar may authorise surplus moneys belonging to a fund to be used in any manner for the purposes of any other fund.

#### Actuarial Valuations.

In the quinquennial valuations between 1904 and 1919 all the societies were valued as at the same date, and particulars of the results were published in earlier issues of this Year Book. Under more recent arrangements the societies are valued in groups in successive years.

Particulars of the last complete valuation—made at various dates between 1930 and 1934—are summarised below, together with valuations of two affiliated societies as at 30th June, 1935.

Valued as at—	Number.	Liabilities.	Assets.			Surplus or Deficiency (—)
			Accumulated Funds.	Future contributions.	Total.	
Affiliated Societies.						
30th June, 1930 ...	4	£ 408,677	£ 183,702	£ 230,797	£ 414,499	£ 5,822
do 1931 ...	3	314,308	123,573	159,260	282,833	(-) 31,475
do 1932 ...	3	3,196,148	1,348,346	1,718,724	3,067,070	(-) 129,078
do 1933 ...	2	1,839,850	799,434	1,061,586	1,861,020	21,170
do 1934 ...	3	2,058,068	921,439	1,195,078	2,116,517	58,449
Total ...	15	7,817,051	3,376,494	4,365,445	7,741,939	(-) 75,112
do 1935 ...	4	377,135	200,266	206,912	407,178	30,043
Single Societies.						
30th June, 1930 ...	11	54,743	46,676	20,063	66,739	11,996
do 1935 ...	11	57,554	42,595	24,819	67,414	9,860

*Accumulated Funds.*

The following statement illustrates the growth of the funds of the Friendly Societies since 1911:—

At 30th June.	Sickness and Funeral Funds.	Medical and Management Fund.	Other Funds.	All Funds.	
				Total.	Per Member.
	£	£	£	£	£
1911*	1,373,722	78,264	49,852	1,506,838	9.14
1916*	1,820,708	101,092	48,471	1,970,271	11.02
1921	2,134,339	194,358	83,065	2,411,762	12.08
1926	2,866,486	237,296	111,688	3,215,470	13.70
1930	3,535,056	266,944	122,594	3,924,594	15.57
1931	3,640,368	261,663	117,209	4,019,240	16.58
1932	3,725,954	278,985	130,129	4,135,068	18.35
1933	3,806,347	280,808	138,638	4,225,793	19.97
1934	3,836,444	298,208	147,607	4,282,259	20.88
1935	3,899,572	304,228	149,057	4,352,857	21.27
1936	4,039,557	336,755	110,191	4,486,503	21.69

\* At 31st December.

Total funds have increased steadily throughout the period, as have average funds per member. Approximately 68 per cent. of accumulated funds were invested in mortgages at 30th June, 1934, 14 per cent. in public securities, 10 per cent. in buildings and other freehold property and 8 per cent. in interest-bearing bank deposits. There has been a material change in the disposition of investments since 1929, as in that year mortgages represented 80 per cent. of total investments and public securities only 1.5 per cent.

*Receipts and Expenditure.*

The receipts and expenditure of the friendly societies in various years since 1906 are shown in the following statement:—

Year. ended 30th June.	Receipts.				Expenditure.					
	Contri- butions.	Interest.	Other.	Total.	Sick Pay.	Funeral Dona- tions.	Medical Atten- dance and Medicine.	Expenses of Manage- ment.	Other.	Total.
	£	£	£	£	£	£	£	£	£	£
*1906	301,076	36,152	22,168	359,396	84,189	23,871	90,698	42,528	21,282	262,568
*1916	508,083	95,103	28,645	631,781	172,497	61,566	178,926	89,630	35,718	538,337
1926	766,772	172,039	61,850	1,000,661	269,768	65,913	307,380	148,808	35,376	827,245
1930	815,551	226,889	75,664	1,118,104	319,329	86,790	331,052	171,410	49,161	957,742
1931	765,113	210,164	49,290	1,024,567	307,979	75,747	298,299	171,820	76,076	929,921
1932	758,229	162,321	106,244	1,026,794	299,508	78,144	292,065	153,500	87,749	910,966
1933	706,755	154,759	77,852	939,366	259,351	83,648	278,515	157,175	71,952	848,641
1934	717,738	167,992	56,296	942,024	251,796	87,961	271,779	148,742	125,282	885,560
1935	712,140	176,254	30,676	919,070	251,803	85,853	277,997	147,455	85,364	848,472
1936	731,637	187,867	94,807	1,014,311	260,745	91,672	285,891	153,636	88,721	880,665

\* Year ended 31st December.

Disbursements on account of benefits increased from £198,758 in 1906 to a maximum amount of £741,096 in 1928-29; they then declined annually to £611,536 in 1933-34 and subsequently rose to £638,308 in 1935-36. The

decrease resulted largely from adjustment of benefits and the growth of unfinancial membership. The cost of medical attendance and medicine has increased, as additional charges were made by medical practitioners and pharmacists, and the average cost per adult member rose from 18s. 2d. in 1906 to 19s. in 1911, and to the highest point of 30s. 10d. in 1928-29; it then fell to 26s. 9d. in 1930-31, and has since risen to 30s. 9d. in 1935-36.

After allowing for interfund transfers and payments as between branches, expenses of management amounted to £151,092 in 1935-36, representing 14s. 8d. per head of mean membership, as compared with 13s. 6d. in 1921-22, 10s. 0d. in 1916, and 7s. 6d. in 1911. In proportion to contributions and to total income, respectively, management expenses represented 20.7 per cent. and 15.7 per cent. in 1935-36, 20.9 per cent. and 16.1 per cent. in 1921-22, 17.6 per cent. and 14.2 per cent. in 1916, and 14.4 per cent. and 11.5 per cent. in 1911.

#### INSURANCE.

Insurance in New South Wales, apart from Government pension funds, is mainly the province of private organisations. The question of national insurance was investigated by a Royal Commission appointed by the Government of the Commonwealth in September, 1923, the final report being issued in March, 1927. The Commission recommended the creation of a national insurance fund to provide sickness, invalidity, maternity, and superannuation benefits. In September, 1928, a National Insurance Bill was introduced into the Federal Parliament, but it was not taken beyond the early stages in view of an impending dissolution of Parliament. Further investigations were instituted by the Commonwealth Government in 1936, enquiry on this occasion being extended to embrace unemployment insurance.

#### *Legislation.*

In New South Wales there is no legislation dealing specifically with the conduct of insurance business, the insurance companies being subject to the Companies Acts. The Life, Fire and Marine Insurance Acts of 1902 and 1917 were enacted in the State Parliament to provide for the protection of life insurance policies and annuities against creditors, and for the issue of special policies in substitution for those lost or destroyed. The section of the 1902 Act relating to marine insurance was superseded by the Commonwealth Marine Insurance Act of 1909, which defines the limit of marine insurance and regulates the terms of the contracts, the liability of the insurers, etc.

A Commonwealth Act passed in 1905 limits the amount of assurance payable on the death of children. The maximum amount ranges from £5 in respect of children under 1 year to £45 in the case of children between the ages of 9 and 10 years, the sums being payable only to parents or their personal representatives. The provisions of the Act do not apply, however, to any insurance effected by persons having an insurable interest in the lives insured or to insurances, *e.g.*, industrial assurances, effected by parents in which the amount payable on the death of a child does not exceed the total amount of premiums actually paid, plus interest up to 4 per cent. per annum.

A bill for the purpose of regulating the conduct of life assurance business in Australia was introduced in the Federal Parliament in August, 1929, and again after a change of Government in March, 1930, but it has not been passed into law. In March, 1932, an Act was passed to provide for the lodgment by insurance companies of deposits with the Commonwealth Treasurer.

## LIFE ASSURANCE.

The volume of life assurance business transacted in New South Wales increased very rapidly both absolutely and in proportion to the population until 1929-30. Progress was then checked and temporary recession ensued as unemployment became widespread and incomes generally were reduced to low levels. In 1932-33 the amount of assurance in force commenced to rise again, and there was rapid expansion thereafter with the result that in 1935-36 the rate of increase was in excess of pre-depression years. The number of institutions transacting life assurance business increased until 1928, then declined, chiefly by reason of amalgamations. There are only two overseas institutions accepting new business in New South Wales, one English and one New Zealand, though another English and an American society still carry a small amount of business contracted in earlier years.

Particulars relating to life assurance are obtained from the reports published by the companies and from official returns collected under the Census Act of 1901.

Life assurance business in New South Wales is conducted generally on the principle of premiums which remain constant throughout the term for which they are payable.

*New South Wales Business—Ordinary Branch.*

The following tables relate only to assurances effected in New South Wales, and the extent of the business in force in the ordinary branch, exclusive of annuities, during the years 1934-35 and 1935-36 is shown below.

The business may be classified broadly in three categories—(1), whole-life assurance payable at death only; (2), endowment assurance payable at the end of a specified period or at death prior to the expiration of the period; (3), pure endowment payable only in case of survival for a specified period.

Classification.	1934-35.				1935-36.			
	Policies in Force.	Amount Assured, exclusive of Bonuses and Re-assurances.	Bonus Additions.	Annual Premium Payable.	Policies in Force.	Amount Assured, exclusive of Bonuses and Re-assurances.	Bonus Additions.	Annual Premiums Payable.
	No.	£	£	£	No.	£	£	£
Assurance...	120,648	66,931,067	15,237,612	1,981,261	128,038	70,636,041	15,970,916	2,043,905
Endowment Assurance	153,964	36,410,274	5,636,077	1,387,449	167,287	40,013,066	5,890,600	1,564,380
Pure Endowment.	13,388	2,254,341	68,040	84,846	13,872	2,401,187	55,732	89,935
Total...	288,000	105,596,582	20,941,729	3,453,553	309,197	113,050,294	21,917,248	3,698,220

In 1935-36 the majority of the policies, viz., 54.1 per cent., represented endowment assurances; whole-life policies were 41.4 per cent., and endowments 4.5 per cent. of the total number. The amount assured under the whole-life policies represented 63 per cent. of the total (exclusive of bonus additions), the average per policy being £552, endowment assurance policies, with an average of £239 per policy, covered 35 per cent. of the total amount assured; and endowment policies, with an average of £173 per policy 2 per cent.

*Industrial Assurance.*

A large business in industrial assurance has developed in New South Wales. The policies in this class are for small amounts, and the premiums in most cases are payable weekly or monthly. Industrial business in the State is transacted by the Australasian companies only.

A classification of the industrial business in force in New South Wales is shown below:—

Classification.	1934-35.				1935-36.			
	Policies in Force.	Amount Assured, exclusive of Bonus Additions	Bonus Additions. *	Annual Premiums Payable.	Policies in Force.	Amount Assured, exclusive of Bonus Additions.	Bonus Additions. *	Annual Premiums Payable.
Assurance ... ..	No. 68,810	£ 1,726,807	£ 64,458	£ 94,813	No. 67,745	£ 1,692,950	£ 57,146	£ 91,969
Endowment Assurance ... ..	559,838	25,637,376	1,072,038	1,529,438	614,073	28,116,754	1,207,912	1,683,322
Pure Endowment ... ..	37,785	1,401,486	.....	88,587	40,784	1,473,008	1,254	92,824
Total ... ..	666,433	28,765,669	1,136,491	1,712,838	722,602	31,282,712	1,266,312	1,868,115

\* Partly estimated.

In the industrial branch endowment assurance policies constituted 85 per cent. of the number of policies and 90 per cent. of the total amount assured. The average amount assured per policy, excluding bonuses, was £25 for assurance, £46 for endowment assurance, and £36 for pure endowment.

#### Annuities.

Transactions in annuities are not numerous, the business in force in New South Wales in 1935-36 being 646 policies for an aggregate amount of £85,145 per annum in the ordinary branch, and one policy representing £22 per annum in the industrial department.

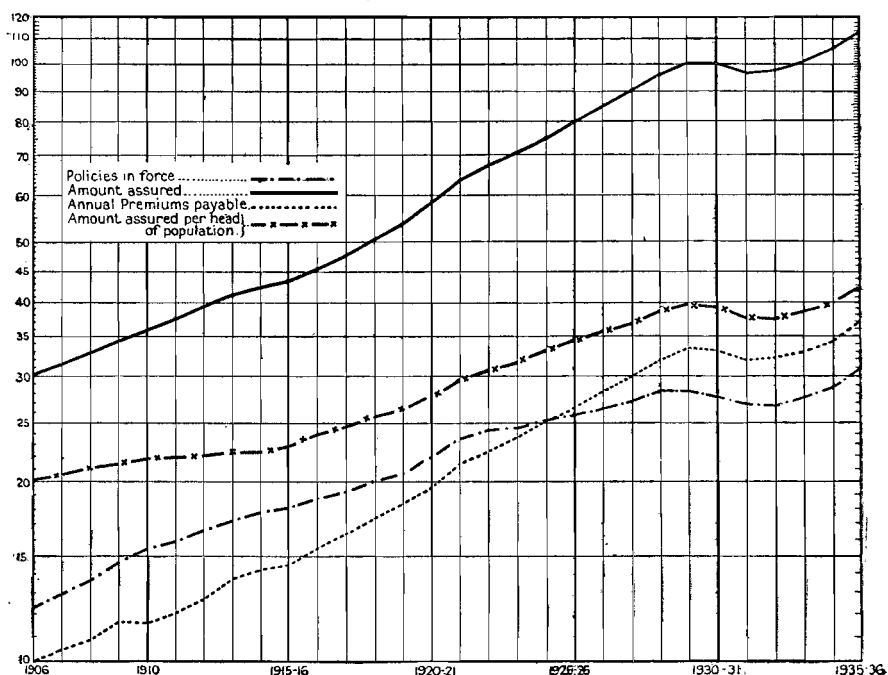
#### New Business.

The new life assurance business, ordinary and industrial, effected in New South Wales during the last eight years, is compared in the following table:—

Year.	Ordinary Branch.			Industrial Branch.		
	Number of Policies.	Amount Assured.	Annual Premiums Payable.	Number of Policies.	Amount Assured.	Annual Premiums Payable.
		£	£		£	£
1928-29	33,298	12,984,604	453,724	131,498	6,987,127	417,364
1929-30	26,422	11,650,396	405,031	124,013	6,821,670	405,139
1930-31	19,515	9,058,478	320,555	97,970	5,102,788	307,401
1931-32	18,784	7,460,863	263,102	89,736	4,203,452	252,045
1932-33	22,981	9,089,545	317,006	105,702	4,682,305	285,570
1933-34	27,670	10,398,379	352,936	119,322	4,923,894	314,942
1934-35	35,002	11,838,720	410,348	139,066	5,643,830	358,603
1935-36	43,845	14,432,258	493,699	151,067	6,322,427	402,424

The amount assured annually under new policies increased steadily until a maximum was attained in 1928-29. The increase occurred in both branches, though the rate of expansion was somewhat greater in the industrial branch. Subsequently the volume of new business declined, until in 1931-32 it was the lowest since 1919-20 in the ordinary branch and 1921-22 in the industrial branch. The recession amounted to 42 per cent. and 40 per cent. respectively. There was rapid recovery after 1931-32, and in 1935-36 new business exceeded the amount in 1928-29 in the ordinary branch, though it was lower by 10 per cent. in the industrial branch.

**LIFE ASSURANCE—ORDINARY BUSINESS, 1906 to 1936.**  
(Ratio Graph.)



The numbers at the side of the graph represent 10,000 policies, £1,000,000 of Assurances, £100,000 of Premiums, and £1 of Assurances per head of population. The diagram is a ratio graph. The vertical scale is logarithmic, and each curve rises and falls according to the rate of increase or decrease. In this it differs from the natural scale graph, in which the curves rise and fall according to the actual increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

A comparative statement of the amount of ordinary and industrial business, excluding bonuses and annuities, in force in New South Wales at the end of each of the last eight years is shown below:—

Year.	Ordinary Branch.			Industrial Branch.		
	Policies.	Amount Assured, excluding Bonus Additions.	Annual Premiums Payable.	Policies.	Amount Assured, excluding Bonus Additions.	Annual Premiums Payable.
	No.	£	£	No.	£	£
1928-29	283,416	96,368,198	3,199,603	604,275	26,186,916	1,604,964
1929-30	283,516	100,129,679	3,323,428	620,027	27,801,127	1,695,877
1930-31	277,610	100,057,680	3,302,965	604,161	27,025,257	1,646,149
1931-32	269,653	97,240,267	3,197,987	576,053	25,490,126	1,517,663
1932-33	268,665	97,851,881	3,210,089	587,296	25,682,806	1,526,890
1933-34	274,183	100,680,443	3,290,882	617,216	26,739,753	1,589,992
1934-35	288,000	105,596,582	3,453,556	666,433	28,765,669	1,712,838
1935-36	309,197	113,050,294	3,698,220	722,602	31,282,712	1,868,115

The bonus additions effective in 1935-36 amounted to £21,917,248 in the ordinary branch, and those in the industrial branch were estimated at £1,266,312.

The net increase in the amount assured during the five years ended 30th June, 1929, totalled approximately £25,000,000 in the ordinary branch and

£11,000,000 in the industrial branch, the average annual increase representing a proportion of 6.2 per cent. and 11.5 per cent. respectively. The amount assured per head of population increased during the period from £31 15s. 10d. to £38 10s. 1d. in the ordinary branch and from £6 15s. 2d. to £10 9s. 3d. in the industrial branch. In 1929-30 the rate of growth declined appreciably, and this was followed by recession in 1930-31 and 1931-32, when the amount assured decreased by 2.9 per cent. and 8.3 per cent. in the respective branches. A small accretion to the amount assured in 1932-33 was then succeeded by rapid recovery of the former rate of expansion, the proportionate increases in the ordinary and industrial branches being respectively 2.9 per cent. and 4.1 per cent., in 1933-34, 4.9 per cent. and 7.6 per cent. in 1934-35, and 7.1 per cent. and 8.7 per cent. in 1935-36. The amount assured per head of population at the end of 1935-36 was £42 8s. 3d. under ordinary policies and £11 14s. 9d. under industrial policies.

The development of life assurance in relation to the population is shown in the following statement, which illustrates also the increase in the average amount per policy and in the premium payable.

Year.	Policies per 1,000 of Population.		Amount Assured per Head of Population.		Average Amount Assured per Policy.		Average Annual Premium payable per Policy.	
	Ordinary.	Industrial.	Ordinary.	Industrial.	Ordinary.	Industrial.	Ordinary.	Industrial.
	No.	No.	£ s. d.	£ s. d.	£	£	£ s. d.	£ s. d.
1928-29	113	241	38 10 1	10 9 3	340	43	11 5 9	2 13 1
1929-30	112	245	39 11 8	10 19 10	353	45	11 14 5	2 14 8
1930-31	109	236	39 3 4	10 11 7	360	45	11 17 11	2 14 6
1931-32	105	223	37 14 3	9 17 9	361	44	11 17 2	2 12 8
1932-33	103	226	37 12 5	9 17 6	361	44	11 19 0	2 12 0
1933-34	104	235	38 8 0	10 4 0	367	43	12 0 1	2 11 6
1934-35	109	252	39 18 6	10 17 6	367	43	11 19 10	2 11 5
1935-36	116	271	42 8 3	11 14 9	366	43	11 19 3	2 11 9

Ordinary assurance business is growing at a rate somewhat more rapid than the growth of population, and industrial business is growing at a much faster rate. The growth proceeded steadily until 1929-30, and, after temporary interruption, was resumed in 1933-34. In the intervening years, 1930-31 to 1932-33, slight set-back resulted from a sharp decline in the volume of new business and a steep rise in the surrender of existing policies. Variations in the value of new business are shown on page 142, and fluctuations in the surrender and maturity of existing policies since 1928-29 are indicated below.

Year.	Payment of Policies, including bonus additions.			
	Surrenders.		Claims-Deaths, Maturity etc.	
	Ordinary.	Industrial.	Ordinary.	Industrial.
	£	£	£	£
1928-29	342,871	36,965	1,771,062	497,346
1929-30	381,961	54,815	1,886,874	522,910
1930-31	623,013	119,959	1,781,727	588,522
1931-32	900,772	147,582	1,972,678	596,406
1932-33	839,579	75,655	2,045,840	627,957
1933-34	749,148	75,368	2,052,799	656,746
1934-35	715,878	59,542	2,171,608	627,475
1935-36	575,504	57,916	2,312,116	647,843

The gradual growth of payments under maturing policies is a natural outcome of the increasing age of societies and business in force. The extensive cancellation of policies by surrender after 1929-30 was, however, a direct result of the depression, and the steady diminution since 1931-32 an accompaniment of economic recovery. As payments made under surrenders are based upon premiums actually paid on policies, the decrease, by reason of surrenders, of amounts assured as shown on page 144 would be considerably greater than is indicated above.

*Australasian Assurance Societies—Total Business.*

The life assurances undertaken in New South Wales by foreign companies represent an insignificant proportion of their total business and of the business done in New South Wales by all companies.

A summary of the total business—ordinary and industrial—of the Australasian societies operating in New South Wales, and of the amount of receipts, expenditure, and accumulated funds, at intervals since 1895, is shown below.

Year.	Societies.	Policies in Force.	Receipts.	Expenditure.	Accumulated Funds, including Paid-up Capital and Reserves.	Interest and Rents.	
						Amount Received.	Average Rate Realised on Mean Funds.
	No.	No.	£ 000	£ 000	£ 000	£ 000	per cent.
1895-96	10	268,242	3,392	2,334	20,299*	1,037	5.21
1900-01	11	331,868	4,093	2,648	26,491*	1,162	4.51
1905-06	14	756,585	5,437	3,834	34,916	1,528	4.48
1910-11	11	1,056,173	7,131	4,619	45,668	1,963	4.46
1915-16	14	1,424,196	9,442	6,085	61,572	2,836	4.74
1920-21	14	1,944,845	14,009	7,944	83,029	4,116	5.16
1925-26	33	2,678,790	22,031	12,768	124,361	6,595	5.52
1930-31	24	3,190,768	29,577	19,711	178,307	9,802	5.67
1931-32	21	3,110,635	28,953	22,752	185,432	9,637	5.30
1932-33	21	3,148,829	28,234	21,563	192,407	8,788	4.65
1933-34	20	3,258,650	29,253	21,209	200,921	8,936	4.54
1934-35	20	3,445,068	31,084	20,292	211,867	9,102	4.41
1935-36	20	3,676,412	32,390	20,961	223,218	9,476	4.36

\* Exclusive of capital and reserve funds, etc.

The annual additions to the funds have shown a considerable increase since 1911, and there was gradual increase in earning power of funds from 1910-11, when 4.46 per cent. was realised, until a rate equal to 5.64 per cent. was reached in 1926-27. The rate in 1928 and 1929 was somewhat lower; it rose to 5.67 per cent. in 1930-31, and has since fallen to 4.36 per cent., which is the lowest point since 1907.

The following table shows details of the total receipts and disbursements of the Australasian institutions during 1935-36 for both classes of business, including small amounts of business done in New South Wales by non-Australasian companies.

Particulars.	Ordinary Branch.	Industrial Branch.	Total.
<b>Receipts—</b>			
Premiums—	£	£	£
New ... ..	2,448,625	5,840,812	22,274,739
Renewal ... ..	13,985,302		
Consideration for Annuities... ..	485,204	...	485,204
Interest on Investments* ... ..	7,714,273	1,536,286	9,250,559
Rents ... ..	199,517	26,093	225,610
Other Receipts ... ..	107,937	46,412	154,349
Total Receipts ... ..	24,940,858	7,449,603	32,390,461
<b>Expenditure—</b>			
Claims and Policies matured ... ..	9,915,570	2,023,887	11,939,457
Surrenders ... ..	2,394,886	251,909	2,646,795
Annuities ... ..	234,332	40	234,372
Cash Bonuses and Dividends ... ..	452,758	74,666	527,424
Expenses, incl. commission, and brokerage	2,753,817	1,946,092	4,699,909
Taxes ... ..	563,585	87,672	651,257
Depreciation, Reserves, Transfers, etc. ... ..	174,174	88,026	262,200
Total Expenditure ... ..	16,489,122	4,472,292	20,961,414

\* Includes rent in some cases.

A more detailed comparison of receipts and expenditure for each of the past ten years is shown on pages 267 and 268 of the Statistical Register for 1935-36.

The receipts of the societies consist mainly of premiums on policies and of interest and rents arising from investments. The former, including consideration for annuities, represented 67.8 per cent. of the receipts in 1935-36, and the latter 31.7 per cent. in the ordinary branch; corresponding figures for the industrial branch were 78.4 per cent. and 21.0 per cent. respectively. Payments on account of death claims, policies matured and surrendered, and cash bonuses and dividends amounted in 1935-36 to £12,997,546, or 78.8 per cent. of the total expenditure in the ordinary branch, and in the industrial branch to £2,350,502, or 52.6 per cent. Expenses of management and taxation constituted 20.1 per cent. of the expenditure in the ordinary branch and 45.5 per cent. in the industrial.

The excess of receipts over expenditure, carried to assurance and other funds, amounted to £8,451,736 and £2,977,311 in the respective departments, representing proportions to total receipts of 34 per cent. and 40 per cent.

*Expenses of Management.*

The ratio between management expenses and premium income must necessarily vary with the volume of new business transacted, and with the age of the society, quite apart from the competition for new business. The following figures show in respect of the ordinary and industrial departments of the Australasian societies the cost of management, including commission and taxes, and its proportion to premium income and gross receipts.

Year.	Management Expenses, Taxes, etc.	Premium Income.	Gross Receipts.	Management Expenses, etc.	
				Per cent. of—	
				Premium Income.	Gross Receipts.
	£	£	£		
1895-96	438,524	2,380,167	3,392,423	18·42	12·93
1900-01	565,380	2,799,512	4,093,376	20·19	13·81
1905-06	858,741	3,500,448	5,437,589	24·53	15·79
1910-11	1,016,153	5,074,204	7,131,250	20·03	14·25
1915-16	1,252,438	6,591,572	9,442,131	19·00	13·26
1920-21	2,222,218	9,870,814	14,009,157	22·51	15·86
1925-26	3,727,350	14,641,970	22,031,257	25·46	16·92
1930-31*	4,897,622	19,557,848	29,577,303	25·04	16·56
1931-32*	5,412,507	19,094,060	28,953,339	28·35	18·69
1932-33*	5,672,846	19,084,290	28,233,517	29·72	20·09
1933-34*	5,596,867	19,682,055	29,253,363	28·44	19·13
1934-35*	4,959,833	20,574,699	31,083,915	24·11	15·96
1935-36*	5,351,166	22,274,739	32,390,461	24·02	16·52

\* Includes a small amount of New South Wales business of foreign companies.

The expenses of management in 1935-36 include £2,342,734 commission and brokerage, £535,515 payments to agents, etc., £651,257 income and other taxes and £1,821,660 in general office management expenses. Increased payments on account of taxation were responsible for the high ratios in the years 1931-32 to 1933-34. The amount of taxes paid increased from £351,329 in 1928-29 to £889,513 in 1930-31, to £1,780,824 in 1932-33, and thence declined to £1,545,894 in 1933-34 and to £654,484 in 1934-35.

Particulars regarding the management expenses of the ordinary and industrial branches are stated separately in the following table for each of the past eight years:—

Year.	Ordinary Branch.		Industrial Branch.	
	Proportion of Management Expenses (including Taxes) to—			
	Premium Income.	Total Receipts.	Premium Income.	Total Receipts.
	per cent.	per cent.	per cent.	per cent.
1928-29	18·45	12·06	37·36	30·11
1929-30	20·83	13·27	37·42	29·87
1930-31	21·03	13·15	26·16	28·45
1931-32	25·15	15·75	37·38	28·97
1932-33	26·57	17·11	38·69	30·43
1933-34	24·93	15·98	38·48	30·14
1934-35	19·99	12·59	35·55	27·45
1935-36	20·19	13·30	34·82	27·30

The expenses of the industrial branch are necessarily very high in proportion to the receipts, on account of the house-to-house method of collection, which is an essential feature of the system.

*Liabilities and Assets.*

The following table gives a summary of the total liabilities and assets of the Australasian societies at the various balance dates in 1935-36:—

Liabilities.		Assets.	
Assurance Funds—	£	Loans—	£
Participating in Profits ...	198,978,991	On Mortgage ...	45,500,313
Not participating in Profits ...	2,203,775	„ Municipal and Other	
Claims Investment Fund ...	16,511	Local Rates ...	40,687,775
Other Assurance Funds ...	14,841,486	„ Reversionary, Life, and	
		Other Interests ...	538,740
Total ...	216,040,763	„ Policies ...	28,837,271
Other Funds—		„ Personal Security ...	16,295
Guarantee and Contingency		„ Government Securities..	41,351
Funds ...	584,135	„ Other Debentures and	
Investment Fluctuation		Bonds ...	1,455,034
Fund ...	3,459,327	Miscellaneous Loans ...	1,168,220
Paid-up Capital ...	1,662,387		
Reserve Funds ...	1,471,391	Total ...	118,244,999
Total Funds ...	223,218,003	Government Securities ...	72,847,791
Other Liabilities—		Other Securities and Shares ...	14,255,664
Claims admitted but not		Real Estate ...	11,881,213
paid ..	2,017,265	Cash, Fixed and Current	
Outstanding Accounts ...	570,798	Bank Accounts ...	3,688,976
Miscellaneous ...	1,749,713	Other Assets ...	6,637,446
Total Liabilities ...	£227,555,779	Total Assets ...	£227,555,779

Under legislation passed in 1932 companies are obliged to deposit certain sums with the Commonwealth Treasury, as a guarantee of good faith, and these amounts are included in their balance-sheets under the head of Government securities or deposits.

The rapid growth of funds of life assurance companies is shown on page 146, and the following table indicates the main classes of assets in which accumulated funds have been invested over the past twenty years:—

Year.	Loans on—				Government and Other Securities and Shares.	Real Estate.
	Mortgage.	Municipal and Other Local Rates.	Policies.	Other.		
	£000	£000	£000	£000	£000	£000
1915-16 ...	25,648	10,467	8,035	1,387	11,046	3,041
1920-21 ...	19,371	10,663	8,427	1,667	42,462	3,474
1925-26 ...	25,995	18,673	13,918	3,802	53,585	4,944
1930-31 ...	41,716	37,018	24,359	3,003	58,472	8,236
1931-32 ...	41,169	37,769	26,807	3,098	61,213	8,538
1932-33 ...	40,437	37,806	27,977	3,016	67,833	9,248
1933-34 ...	40,454	38,250	23,524	2,905	74,359	9,636
1934-35 ...	42,655	39,415	28,791	3,078	80,235	10,647
1935-36 ...	45,500	40,688	28,837	3,220	87,103	11,881

In early years loans on mortgage constituted the chief avenue for the investment of funds. Large subscriptions to war loans were, however, accompanied by a substantial decline in mortgages. In the ten years 1920-21 to 1930-31 the greatest relative growth occurred in loans to municipal and other local bodies, on policies and on mortgage. During the period 1930-31 to 1933-34 Government securities were the main object of investment, although relatively substantial additions were made to policy loans. Subsequently there was a continuance of large investment in Government loans but loans on mortgage and to local bodies

increased appreciably while policy loans were of small dimensions. Considerable sums are held on fixed deposits with banks, the amount in 1935-36 being £2,609,150, while current bank balances totalled £935,517.

The ratio of loans on the security of mortgages, local rates, policies, etc., to total assets, was between 60 and 70 per cent. up to 1915-16; it declined to 43 per cent. by 1921-22, rose to 58 per cent. in 1929-30, and thence declined again to 52 per cent. in 1935-36. These changes were due mainly to fluctuating investments in Government loans, which represented 17 per cent. of total assets in 1915-16, compared with 44 per cent. in 1921-22, 28 per cent. in 1929-30, and 32 per cent. in 1935-36.

#### FIRE, MARINE, AND GENERAL INSURANCE.

The nature of the local insurances effected during the year 1935-36 is shown in the following table. The particulars relate to New South Wales risks only. Premiums represent the aggregate of gross premiums as disclosed by individual companies less amounts paid to re-insurers in Australia and New Zealand. Losses on claims are shown similarly as the aggregate of individual companies less recoveries under re-insurances in Australia and New Zealand. No deductions from premiums or losses are made in connection with treaty arrangements under which re-insurances are effected with overseas companies. Because of this the table cannot be taken as an indication of the net underwriting results accruing to the companies actually operating in New South Wales. Income in the form of interest, rents, etc., accrues largely from the investment of reserve funds accumulated in past years, but as the companies frequently control investments from head office without regard to the State or country in which accumulated profits were earned, the amount shown below cannot be taken as a true measure of income from the investment of surplus funds derived from the conduct of business in New South Wales.

Nature of Insurance.	Premiums in New South Wales.	Expenditure in New South Wales.						
		Losses.	Expenses of Management.		Total.	Proportion of Premium Income.		
			Com- mission and Agents' Charges	Other.		Losses	Com- mission and Agents' Charges	Other Manage- ment Expen- ses.
	£	£	£	£	£	per cent.	per cent.	per cent.
Fire .. .. .	1,987,851	1,114,762	332,017	613,070	2,059,849	56·08	16·70	30·84
Marine .. .. .	388,584	190,215	29,463	96,728	316,406	48·95	7·58	24·89
Personal Accident .. .. .	157,516	64,685	32,825	29,320	126,830	41·07	20·84	18·61
Employers' Liability and Workers' Compensation .. .. .	1,281,365	1,019,728	60,237	216,327	1,296,292	79·58	4·70	16·88
Public Risk, Third Party .. .. .	48,233	13,609	7,650	10,001	30,660	26·97	15·86	20·73
Plate-glass .. .. .	62,633	18,419	11,433	14,262	44,144	29·41	18·25	22·82
Motor Car and Motor Cycle .. .. .	949,589	583,859	139,771	151,121	874,751	61·49	14·72	15·91
Hailstone .. .. .	61,400	40,861	9,566	16,660	67,087	66·55	15·58	27·13
Boiler Explosion .. .. .	12,628	4,670	1,122	2,392	8,184	36·98	8·89	18·94
Live Stock .. .. .	17,145	5,772	2,691	4,716	13,179	33·67	15·70	27·51
Burglary .. .. .	67,858	21,353	11,688	14,692	47,733	31·47	17·22	21·65
Guarantee .. .. .	30,451	11,520	4,545	6,303	22,368	37·83	14·93	20·70
Loss of Profits .. .. .	43,519	14,065	7,349	12,341	33,755	32·32	16·89	28·36
Elevator .. .. .	2,766	74	436	706	1,216	2·68	15·76	25·52
Sprinkler .. .. .	3,203	340	510	901	1,751	10·60	15·90	28·09
Pluvius .. .. .	11,460	4,940	1,167	2,697	8,804	43·11	10·18	23·53
Householders' Comprehensive .. .. .	77,474	21,096	10,784	18,471	50,351	27·23	13·92	23·84
Other .. .. .	32,131	15,850	3,622	4,991	23,863	47·77	11·27	15·22
Total Premiums .. .. .	5,235,811							
Total Interest, etc. . . . .	271,676							
Total .. .. .	5,507,487	3,144,718	666,876	1,215,629	5,027,223	60·06	12·74	23·22

The total losses amounted to 60 per cent. of the premiums. The expenses for commission and agents' charges were £666,876, and for general management £1,215,629; making a total of £1,882,505 or 36 per cent. of the premium income. In 1934-35 losses amounted to £2,248,190, or 47 per cent. of premium income, and expenses, £1,787,252, represented 37.7 per cent.

The principal classes of insurance, according to the amount of net premiums, are fire, employers' liability and workers' compensation, motor vehicles and marine.

General insurance business transacted in New South Wales was at a maximum in 1928-29, when premium income amounted to £6,229,699. It declined thereafter, slightly in 1929-30 and then sharply in 1930-31 and 1931-32. All classes of insurance were affected; workers' compensation premiums declined by 50 per cent., motor vehicle by 42 per cent., personal accident by 36 per cent., marine by 21 per cent., and fire by 11 per cent. Since 1932-33 total premium income has increased by £900,326, of which £489,340 was attributable to the year 1935-36.

A summary of the revenue and expenditure in respect of general insurance transactions in New South Wales in 1929-30 and the five years ended 30th June, 1936, is shown below:—

Particulars.	1929-30.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
<b>Revenue—</b>	£	£	£	£	£	£
Net Premiums ...	6,038,874	4,334,226	4,335,485	4,449,320	4,746,471	5,235,811
Interest, etc. ...	354,407	278,314	258,703	261,090	266,947	271,676
Total ...	6,393,281	4,612,540	4,594,188	4,710,410	5,013,418	5,507,487
<b>Expenditure—</b>						
Losses ...	3,330,404	2,314,044	1,882,944	2,003,061	2,248,190	3,144,718
Management— Commission and Agents' Charges ...	790,875	557,343	571,655	566,061	605,864	666,876
Other Expenses ...	1,397,116	1,210,581	1,223,163	1,171,989	1,181,388	1,215,629
Total ...	5,518,395	4,081,968	3,677,762	3,741,111	4,035,442	5,027,223
Excess of Revenue	874,886	530,572	916,426	969,299	977,976	480,264
<b>Proportion to Premium Income—</b>	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
Losses ...	55.15	53.39	43.43	45.02	47.37	60.06
<b>Expenses—</b>						
Commission, etc. ...	13.10	12.86	13.19	12.72	12.76	12.74
Other ...	23.14	27.93	28.21	26.34	24.89	23.22

During the past five years approximately 50 per cent. of the premiums were repaid to insurers to cover losses. The fluctuations in the excess of revenue were due mainly to the amount of losses in fire insurance.

In proportion to premium income the losses and expenses vary greatly in the different classes of insurance. The following table shows a comparison under these heads for the past five years:—

Class.	Proportion per cent. of Losses to Premiums.					Proportion per cent. of Expenses to Premiums.				
	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Fire ... ..	38.83	29.27	27.34	28.45	56.1	47.4	50.4	47.9	48.0	47.5
Marine ... ..	95.42	36.49	49.51	51.94	48.9	39.5	39.2	34.9	34.4	32.5
Personal Accident ...	48.62	41.92	42.97	41.61	41.1	43.0	41.4	40.2	40.1	39.4
Employers' Liability and Workers' Compensation ... ..	83.37	79.46	78.77	77.48	79.6	29.9	26.1	24.0	22.7	21.6
Public Risk, Third Party	21.45	26.67	20.18	20.62	27.0	40.1	40.7	40.2	38.2	56.6
Plate Glass ... ..	34.06	30.39	28.20	28.68	29.4	43.2	43.8	43.8	41.0	41.1
Motor Car and Motor Cycle ... ..	52.23	49.39	49.99	55.94	61.5	33.0	34.7	35.2	32.5	30.6
Hailstone ... ..	42.25	35.23	84.22	90.55	66.5	40.4	42.9	43.2	43.0	42.7
Boiler Explosion ...	32.17	31.36	42.82	28.14	37.0	30.6	27.0	31.7	28.8	27.8
Live Stock ... ..	196.43	71.01	37.75	37.84	33.7	46.8	39.0	44.4	43.3	43.2
Burglary ... ..	46.76	42.85	35.49	36.40	31.5	39.4	40.3	39.8	30.4	38.9
Guarantee ... ..	22.21	27.03	19.97	32.81	37.8	38.1	37.8	37.0	36.0	35.6
Loss of Profits ... ..	7.70	4.77	5.96	12.05	32.3	44.1	46.8	48.5	48.3	45.2
Elevator ... ..	0.30	1.60	1.34	1.56	2.7	43.8	47.4	45.2	43.6	41.3
Sprinkler ... ..	131.60	12.39	13.88	21.52	10.6	39.6	44.9	42.7	42.7	44.0
Other ... ..	48.50	58.52	54.92	43.38	34.2	35.4	58.8	36.6	35.6	34.4
Total ... ..	53.39	43.43	45.02	47.37	60.1	40.8	41.4	39.1	37.7	36.0

In some cases the losses and expenses of management combined exceed the amount of premium income. This does not necessarily mean an aggregate loss on the class of business concerned, because societies have other sources of income, such as interest, which it is not possible to allocate to respective classes of insurance.

Many policies are for a period of twelve months, and the majority of the insurance companies set aside annually a reserve for unexpired risks. In the case of fire insurance the amount so set aside is usually 40 per cent. of the net premium income of the year. Underwriting deficiencies incurred in the fire department since the year ended 30th June, 1921, were £104,105 in 1922, £195,718 in 1923, £208,656 in 1924, £340,501 in 1927, £3981 in 1928, £300,695 in 1929, and £71,998 in 1935-36. Surpluses, which occurred in other years, amounted to £291,199 in 1932, £406,571 in 1933, £485,424 in 1934, and £457,569 in 1935.

The total amount of the fire insurance written in New South Wales was £632,831,000 in 1929-30, £574,140,000 in 1934-35, and £579,929,000 in 1935-36. The measures taken for the prevention of fire are described in the chapter "Local Government."

Insurance relating to the liability of employers grew rapidly while wages were rising and as the scope of workers' compensation was extended by legislation. An amended Workers' Compensation Act, which commenced on 1st July, 1926, increased the amount of compensation payable, extended the benefits to a large body of workers previously excluded, and placed upon employers the obligation of insuring against liability in respect of practically all classes of employees. Premium income thus increased from £645,991 in 1924-25 to £1,749,775 in 1927-28, but subsequently declined to £775,088 in 1931-32. The decline was due partly to a revision of charges consequent upon a restriction of benefits and the accumulation of experience regarding risks carried, and partly to the widespread growth of unemployment in

1930-31 and 1931-32. Economic recovery caused premium income to rise thereafter, but an increase of £214,608 in 1935-36, to £1,281,365, was due in part to a higher scale of charges levied in respect of certain classes of risk. Details regarding the workers' compensation law and its operation are shown in chapter "Employment" of this Year Book.

The insurance of motor cars also developed rapidly, its growth being due to an increased use of these vehicles, but premiums declined in successive years from £1,144,608 in 1928-29 to £630,537 in 1932-33. In 1935-36 premiums amounted to £949,589, the increase recorded in 1934-35 being £149,027, and in 1935-36 £135,105.

For marine insurance, the premium receipts declined from £552,202 in 1925-26 to £426,548 in 1929-30 and to £295,887 in 1930-31. Following small increases in succeeding years premiums amounted to £388,584 in 1935-36.

#### *Government Insurance Office.*

The Government Insurance Office of New South Wales was constituted by the Government Insurance (Enabling and Validating) Act, 1927, deemed to have commenced on 30th June, 1926. Its establishment was the outcome of the extension of workers' compensation benefits in 1926 in order that employers might be able to fulfil at the lowest cost their compulsory obligations to insure employees. An internal insurance fund which had been created under the Treasury Insurance Board in 1911, for the insurance of Government buildings against fire risks, was taken over by the office.

The Government Insurance Office is empowered to transact workers' compensation insurance without limitation in respect of both private and public employers. Power to operate in other branches of general insurance business, such as fire, marine, motor, etc., is, however, limited to insurances effected with Government departments and instrumentalities, Government contractors, public servants, and in respect of other matters in which the Government is interested. These powers were exercised until the middle of 1933, since when the activities of the office have been confined to risks of which the Crown is the direct owner or employer. In the case of workers' compensation, however, the office must, as a licensed insurer, accept insurances when required to do so by private employers.

Particulars of the business transacted by the Government Insurance Office during the year 1935-36 are shown below:—

Particulars.	Workers' Compensation.	Fire and Marine.	Motor Vehicles.	Other.	Total.
	£	£	£	£	£
Premiums <i>less</i> Reinsurances, etc. ...	132,963	19,543	7,862	1,716	162,084
Interest, etc. ... ..	12,086	14,779	2,614	2,183	31,662
Total Revenue ...	£ 145,049	34,322	10,476	3,899	193,746
Claims <i>less</i> Reinsurances, etc. ...	104,913	2,109	5,904	871	113,797
Expenses (and Taxation) ...	14,106	4,496	1,352	637	20,591
Total Expenditure ...	£ 119,019	6,605	7,256	1,508	134,388
Surplus ... ..	26,030	27,717	3,220	2,391	59,358

\* Including Treasury Guarantee Fund.

Of the trading surplus £35,562 was appropriated to a contingent liability reserve in respect of premiums unpaid by Government departments and the balance, £23,796, was added to general reserve.

Since the formation of the office on 1st July, 1926, premiums have totalled £2,725,227, and interest, etc., £353,074. Expenditure on claims

amounted to £1,561,766, administration to £267,066, income tax and stamp duty to £181,582, and contributions to Fire Board £26,768. Total trading surpluses £1,041,119, and funds taken over from the Treasury Insurance Board £414,582, have been allocated as follow: Treasury Fire Risks Account £200,000, Consolidated Revenue Account £300,000, bonuses to holders of Workers' Compensation policies £237,513, contingent reserve for unpaid premiums by Government Departments £88,966, and general reserve £629,222. Assets at 30th June, 1936, comprised funds at Treasury £145,708, Government securities £601,137, debtors £18,203, and other £575.

### BANKRUPTCY.

The Bankruptcy Act, 1924-33, of the Commonwealth superseded the bankruptcy laws of the States as from 1st August, 1928. Under the Federal law sequestration orders may be made by the Bankruptcy Court on a bankruptcy petition presented either by a debtor or by a creditor. The Court may refuse to make an order on a debtor's petition if his unsecured liabilities are under £50, and creditors may not petition unless the indebtedness amounts to £50. Upon sequestration the property of the bankrupt vests in a official receiver for division amongst the creditors. Provision is made also for compositions and assignments without sequestration and for deeds of arrangement.

Statistics relating to the sequestration and assignment of estates of persons who are unable to pay their debts afford some indication of the fluctuations in the business conditions of the community. It is not practicable to make comparisons between the transactions in former years under the State law and those recorded since the commencement of the Federal system owing to the material alterations made in regard to legal proceedings between debtors and creditors. Moreover the Federal records did not provide an entirely satisfactory basis for conclusions until the people became familiar with these changes.

The following statement shows particulars of the bankruptcies (sequestrations, compositions, assignments, and deeds of arrangement) in New South Wales under the Bankruptcy Act of the Commonwealth in each of the past seven years. The records are inclusive of cases in the Federal Capital Territory which for the purposes of the Act is included in the Bankruptcy district of New South Wales:—

Particulars.	Year ended 31st July—						
	1930.	1931.	1932.	1933.	1934. *	1935. *	1936. *
<b>Sequestration Orders*—</b>							
Number ...	546	685	387	302	346	251	247
Liabilities ... £	922,966	739,788	897,497	434,059	362,264	269,103	572,566
Assets... £	569,112	515,581	595,307	159,408	166,859	107,832	162,986
<b>Composition and Assignments without Sequestration—</b>							
Number ...	33	43	11	12	14	9	5
Liabilities ... £	187,004	136,848	583,189	27,301	24,263	7,158	3,402
Assets ... £	186,402	102,540	267,122	7,961	7,611	2,628	1,218
<b>Deeds of Arrangement—</b>							
Number ...	466	795	443	313	266	167	173
Liabilities ... £	1,048,118	2,025,875	860,049	602,799	493,342	349,711	275,690
Assets... £	1,050,509	2,004,144	822,079	650,000	510,932	309,676	226,976
<b>Total—Number ...</b>	<b>1,045</b>	<b>1,523</b>	<b>841</b>	<b>627</b>	<b>626</b>	<b>427</b>	<b>425</b>
Liabilities ... £	2,158,088	2,902,511	2,340,735	1,064,159	879,869	625,972	651,658
Assets ... £	1,806,023	2,622,265	1,684,508	817,369	685,402	420,136	391,180

\* Excluding orders for administration of deceased debtors' estates.

Particulars of orders for the administration of estates of deceased persons are not available for all years. Such orders numbered 18 in 1934-35 and 14 in 1935-36, while liabilities amounted to £29,104 and £27,054 and assets to £15,773 and £18,295, respectively.

The influence of moratorium laws in relief of debtors enacted in 1930 was reflected in a decrease in the volume of bankruptcy proceedings as well as in the value of assets relatively to liabilities. The value of assets relatively to liabilities was high in 1930-31 and 1931-32, being 62 per cent. and 70 per cent. respectively in cases in which sequestration orders were made, and 100 per cent. and 75 per cent. respectively under compositions and assignments without sequestration. The ratios fell in 1932-33 to 37 per cent. for sequestrations and 29 per cent. for compositions and assignments, and they had by 1935-36 risen gradually to only 44 per cent. and 36 per cent. respectively. Under deeds of arrangement the deficiency of assets is generally of small amount and surpluses are not infrequent.

Data as to the number of bankruptcies and the amount of liabilities of bankrupts each month are published in the "Monthly Summary of Business Statistics."

At any time after he has been publicly examined, or at such times as are prescribed, a bankrupt may apply for an order of discharge releasing him from his debts, and he must apply when the Court orders him to do so. The Court may either grant or refuse an absolute order of discharge, or may suspend its operation for a specified time or may grant an order subject to conditions with respect to future income or property acquired subsequently. During the year ended 31st July, 1936, 136 applications were made for orders of discharge, 114 orders were granted—13 unconditionally, 19 with conditions, and 82 were subject to suspension for periods under two years—and 49 cases were pending at the end of the year.

#### TRANSACTIONS IN REAL ESTATE.

The procedure in regard to land transfers is regulated under the Real Property Act, 1900, and its amendments. The title under this Act first conferred under the Real Property Act, 1862, is known as "Torrens" title. The main features of the system are transfer of real property by registration of title instead of by deeds, absolute indefeasibility of the title when registered, and protection afforded to owners against possessory claims, as the title under the Act stands good notwithstanding any length of adverse possession. Lands may be placed under the Real Property Act only when the titles are unexceptional. All lands alienated by the Crown since the commencement of the Act are subject to the provisions of the Real Property Act, but transactions in respect of earlier grants are governed by the Registration of Deeds Act unless the land has been brought under the operation of the Real Property Act.

The area of Crown grants registered under the Real Property Act and the total consideration expressed in grants in each of the past eight years

are shown below, also the area and value of private lands brought under the Act:—

Year.	Area.			Value.		
	Crown Lands.	Private Lands.	Total.	Crown Lands.	Private Lands.	Total.
	acres.	acres.	acres.	£	£	£
1929	549,746	38,986	588,732	436,572	2,417,307	2,853,879
1930	550,461	32,130	582,591	493,781	1,899,281	2,393,062
1931	442,681	8,728	451,409	473,718	801,903	1,275,621
1932	399,790	10,689	410,479	445,610	2,359,856	2,805,466
1933	490,368	20,529	510,897	575,187	524,857	1,100,044
1934	655,342	7,173	662,515	884,846	733,146	1,617,992
1935	711,485	4,735	716,220	826,734	1,022,792	1,849,526
1936	693,337	26,034	719,391	846,636	1,346,058	2,192,694

At the close of 1936 lands of a total area of 51,764,260 acres were registered under the Act, the declared value as at date of registration being £125,472,704. The great part of this land consists of Crown grants issued since 1863, and it includes 2,917,073 acres of land originally under the Registration of Deeds Act, but now under the Real Property Act.

The following table shows for each year of the past decade the amount paid as money consideration on sales of private real estate, that is, of lands absolutely alienated, together with buildings thereon, with titles registered under the statutes shown. Transfers of conditional purchases and of leases from the Crown are excluded:—

Year.	Conveyances or Transfers.			Year.	Conveyances or Transfers.		
	Under Registration of Deeds Act.	Under Real Property (Torrens) Act	Total.		Under Registration of Deeds Act.	Under Real Property (Torrens) Act.	Total.
	£000	£000	£000		£000	£000	£000
1927	8,857	47,844	56,701	1932	2,255	9,987	12,242
1928	9,364	47,462	56,826	1933	2,989	12,206	15,195
1929	9,500	45,100	54,600	1934	5,174	18,316	23,490
1930	5,123	20,987	26,110	1935	4,880	21,210	26,090
1931	3,213	10,473	13,686	1936	6,486	27,060	33,546

Monthly statistics of sales of real estate are published in the "Monthly Summary of Business Statistics."

As already mentioned, the Real Property Act provides that on the issue of a certificate the title of the person named in the certificate is indefeasible. If a transfer has been made in error, the holder of a certificate cannot be dispossessed of the property concerned unless he has acted fraudulently, therefore provision has been made to enable the Government to compensate persons erroneously deprived of property. An assurance fund was created by means of a contribution of one halfpenny in the pound on the declared capital value of property when first brought under the Act and upon transmission of titles of estates of deceased persons. In 1907 the fund, amounting to £255,059, was amalgamated with the Closer Settlement Fund, to which subsequent contributions have been paid.

#### REGISTRATION OF MONEY-LENDERS.

Under the Money-lenders and Infants Loans Act, 1905, money-lenders must be registered at the Registrar-General's Office, and they must conduct their business only under their own or their firms' names, and at their registered offices. The term "money-lender" includes every person or company

transacting the business of money-lending, but it excludes licensed pawn-brokers, registered friendly societies, institutions incorporated by special Act of Parliament to lend money, and banking and insurance companies. The number of registrations and renewals during the year 1936 was 143.

#### MORTGAGES OF REALTY AND PERSONALTY.

Mortgages, except those regulated by the Merchant Shipping Act, may be registered at the Registrar-General's Office, but there is a large number of unregistered mortgages of which records are not obtainable.

Mortgages of land are registered under the Registration of Deeds Act or the Real Property Act, according to the title of the property at the date of mortgage. The consideration given generally represents the principal owing, but in some cases it stands for the limit within which clients of banks and of other loan institutions are entitled to draw.

Liens on wool, mortgages on live stock, and liens on growing crops are registered under a special Act. Mortgages on live stock are current till discharge, and liens on wool mature at the end of each season, terminating without formal discharge. The duration of liens on agricultural and horticultural produce may not exceed one year.

Mortgages on personality (other than ships and shipping appliances), wool, live stock, and growing crops are registered at the office of the Registrar-General in terms of the Transfer of Records Act, 1923, which was proclaimed on 18th October, 1925. Previously they had been filed at the Supreme Court. A bill of sale comprising household furniture actually in use by husband and wife living together is ineffective unless the consent of the wife or the husband of the maker or the giver of the bill is endorsed thereon. The law requires that each document must be filed within thirty days after it is made or given, otherwise the transaction is void as against execution creditors and against the official assignee or the trustee of a bankrupt estate. The registration of a bill of sale must be renewed every twelve months, and in order to prevent fraud and imposition the records are open to the inspection of the public. Information is not readily available to show the total amount of advances made annually on bills of sale.

Mortgages of registered British vessels are arranged under the Imperial Merchant Shipping Act of 1894.

Particulars of the mortgages of land, crops, wool, and live stock effected during each of the last nine years, are shown below.

Year.	Mortgages of Land.		Mortgages on Crops, Wool, and Live Stock.			
	Number.	Consideration.	Number.			Consideration.
			Crops.	Wool.	Live Stock.	
		£				£
1928	50,005	47,728,870	10,259	3,614	4,614	6,266,633
1929	50,841	48,420,657	7,211	3,709	4,481	6,451,596
1930	36,402	35,037,786	13,542	4,508	4,453	9,842,668
1931	18,959	18,790,164	12,377	5,565	6,437	10,739,592
1932	14,557	8,642,026	10,346	4,773	5,578	8,474,237
1933	20,503	9,605,499	8,501	4,763	4,789	7,420,574
1934	23,314	15,488,239	6,045	4,807	6,601	6,161,688
1935	27,078	16,531,251	5,385	4,749	5,692	5,607,912
1936	27,538	20,510,665	4,434	4,541	5,207	5,736,568

The amounts shown under the heading "Consideration" include only the cases in which a specific amount is stated in the deeds, whether the amount was actually advanced or not. Where the sum advanced is liable to fluctuation, it is usual to insert the words "valuable consideration" or

"cash credit," etc., instead of a definite sum. In view of the number of mortgages in which the amount is omitted, it is probable that the totals are understated. Complete records of discharges and foreclosures are not available.

Many mortgages of land are of comparatively short duration, and until the introduction of the moratorium at the end of 1930 were renewed at maturity. For this reason amounts stated in the table for 1930 and earlier years do not represent new advances. In immediately preceding years the figures relate substantially to new mortgages as the sharp decline which then became evident was due in large measure to the absence of renewals. It is apparent, however, that the registration of renewals must be made on an increasing scale with the effluxion of time since the moratorium was first imposed.

The amount of mortgage registrations as shown in the foregoing table comprises first and second mortgages and the registration of collateral securities in respect of subsisting mortgages. An analysis under these headings of mortgages registered during the past three years appears below:—

Mortgages of Land.	Year ended 31st December.		
	1934.	1935.	1936.
First Mortgages—	£000	£000	£000
Urban Securities ... ..	6,113	8,149	10,269
Rural ... ..	4,675	4,332	4,958
Unspecified ... ..	898	298	506
Total first ... ..	11,686	12,779	15,733
Collaterals ... ..	2,432	2,312	3,289
Second & other Mortgages ... ..	1,371	1,440	1,489
Total ... ..	15,489	16,531	20,511

According to a dissection of first mortgages for which consideration was disclosed, amounts advanced by various classes of mortgagees during 1936 were: Government, £1,712,000, banks £1,618,000, institutions £7,139,000, and private and other £5,264,000.

The rights of mortgagees have been restricted by the operation since December, 1930, of moratorium laws, now revised and consolidated by the Moratorium Act, 1932-36. Bankers' liens and liens on crops and wool do not come within the scope of the Act, nor do mortgages executed in favour of a building society or the Crown, except those under the Returned Soldiers Settlement Act or in favour of the Commissioners of the Rural Bank of New South Wales. Hire purchase agreements and judgment debts are subject to special provisions. Benefits extend to mortgages executed both before and after the commencement of the moratorium, unless specially excluded by agreement in the prescribed form.

Without leave of the Court, a mortgagee may not exercise any of his rights for the recovery of money, or for the enforcement or realisation of the security. The mortgagee is not precluded from entering into possession without an order of the Court, if interest or rates and taxes are in arrears for at least two years, or if there has been default in insurance or maintenance, or if the mortgagor abandons possession or comes under the influence of the bankruptcy laws or their equivalent; but in any such case the mortgagor may apply within three months to the Court for an order directing the mortgagee to vacate possession.

In the case of mortgages of land, the moratorium extends to interest payments. Here the mortgagee can only exercise his right to sue if the mortgagor relinquishes his right to protection or comes within the influence of the bankruptcy laws or their equivalent.

The due date for payment of principal moneys was by the Act of 1930 extended to 1933. The Act of 1932 extended the due date of payment to the day of the month in 1936 corresponding to the day of the month specified in the mortgage, or to 28th February, 1936, when payable on demand. In 1935 the due date was further extended to 1938. The court may grant a further extension upon the application of a mortgagor.

#### PRIVATE WEALTH.

Estimates of the wealth of New South Wales at intervals since 1891 were reviewed in detail in the 1921 issue of the Year Book, and the following statement supplies a summary of the estimates relating to private wealth at ten-year intervals since 1901 and in 1925.

Year.	Estimated Value.	
	Total.	Per Head.
	£	£
1901 ... ..	368,568,000	270
1911 ... ..	553,816,000	333
1921 ... ..	947,930,000	450
1925 ... ..	1,132,000,000	498

#### *Estates of Deceased Persons.*

Some information relating to the distribution of wealth may be gleaned from returns relating to the estates of deceased persons which are valued for the purpose of assessing death duties. In accordance with the provisions of the Stamp Duties Act the estates are deemed to include all the property of the deceased persons which is situated in New South Wales, including property which, within three years prior to death, was transferred as a gift, or vested in a private company or trust in consideration of shares or other interest, and moneys payable under life assurance policies, etc.

The following table shows the number of estates and the value as assessed for probate duty during the ten years ended 30th June, 1936, including intestate and other estates administered by the Public Trustee:—

Year ended 30th June.	Estates.	Amount.	Year ended 30th June.	Estates.	Amount.
	No.	£		No.	£
1927	7,064	18,138,133	1932	8,089	17,504,038
1928	7,749	21,819,953	1933	8,010	19,292,817
1929	7,494	24,548,457	1934	8,636	20,096,120
1930	8,406	25,002,546	1935	8,544	20,300,912
1931	7,332	20,562,001	1936	9,644	22,263,665

A rough test of the diffusion of wealth may be made by relating the number of people who died possessed of property to the total number of deaths, as in the following statement. The figures in this and in the succeeding table are exclusive of estates administered by the Curator of Intestate Estates for the years prior to 1911, and the figures for 1919 and subsequent years indicate the relation between the number of deaths in the calendar year stated and the number of estates on which probate was granted

in the twelve months ended six months later. The particulars showing estates in calendar years are not available since 1918, and probate is not granted usually until several months after the death of a testator:—

Period.	Proportion of Deceased Persons with Estates per 100 Deaths.	Period.	Proportion of Deceased Persons with Estates per 100 Deaths.
1880-84	11·0	1920-24	29·0
1885-89	11·6	1925-29	33·3
1890-94	13·2	1930-34	37·0
1895-99	14·9	1931	38·0
1900-04	17·0	1932	37·5
1905-09	19·1	1933	38·7
1910-14	22·9	1934	36·4
1915-19	30·1	1935	39·3

The figures indicate a wide diffusion of property, but the deaths include those of a large number of minors at ages when the proportion of property owners is small. The next table shows the proportion of estates per 100 deaths of adult males, and, as a large number of women are possessors of property in their own right, the ratio of estates to the deaths of adults of both sexes.

Period.	Ratio of Estates per 100 Deaths of Adult Males.	Ratio of Estates per 100 Deaths of Adult Males and Females.	Period.	Ratio of Estates per 100 Deaths of Adult Males.	Ratio of Estates per 100 Deaths of Adult Males and Females.
1880-84	34·6	22·3	1920-24	68·1	39·3
1885-89	37·5	23·8	1925-29	75·6	43·3
1890-94	41·2	25·8	1930-34	79·7	45·0
1895-99	42·7	26·2	1931	83·7	46·5
1900-04	46·0	27·8	1932	79·9	45·3
1905-09	48·8	29·2	1933	80·0	45·7
1910-14	56·6	34·0	1934	77·8	43·6
1915-19	71·3	42·1	1935	81·0	45·8

The foregoing figures include the estates of persons who died abroad, but usually the number is not sufficient to cause an appreciable degree of error. The proportions during the war period, however, were increased considerably by reason of the inclusion of a large number of estates left by members of the naval and military forces, as the deaths which occurred abroad were not included in the number on which the ratios shown in the table are based. Making due allowance for the deaths of absentees, it is apparent that the proportion of property-owners in the State has increased.

An indication of the proportionate distribution of wealth may be gained from an analysis of the value of the estates of deceased persons, and in the following statement the estates on which probate was granted during the ten years ended 30th June, 1936, have been graded according to value:—

Value of Estate.	Number of Deceased Persons leaving Property.	Value of Estates of Deceased Persons.	Proportion in each Group.	
			Number.	Value.
		£	Per cent.	Per cent.
Under £1001 ... ..	48 882	16,606,298	60·37	7·93
£1001 to £5,000 ... ..	23,654	49,528,380	29·22	23·64
£5001 to £12,000 ... ..	5,280	40,248,529	6·52	19·21
£12,001 to £25,000 ... ..	2,042	34,476,813	2·52	16·45
£25,001 to £50,000 ... ..	720	25,325,721	0·89	12·09
Over £50,000 ... ..	390	43,342,901	0·48	20·68
Total ... ..	80,968	209,528,642	100·00	100·00

The average value per estate during the period was £2,588, but of the property-owners who died 60 per cent. possessed less than £1,000, the total value of their property being nearly 8 per cent. of the aggregate. Approximately half of the property devised was contained in 3·9 per cent. of the estates.

#### PRIVATE INCOMES.

Formerly the narrow scope of the State income-tax and latterly the inadequacy of statistical data made available concerning incomes assessed for purposes of State income tax rendered it impossible to formulate estimates of the national income, and, for various reasons, the information published by the Commissioner of Federal Taxation has been of very limited assistance. However, satisfactory results were obtained for the year 1920-21 by using the returns of occupations and breadwinners obtained at the census of 3rd April, 1921, in conjunction with statistics relating to income derived during the year ended 30th June, 1921, published by the Federal Commissioner of Taxation. An estimate based on these data was set forth in detail in the 1924 issue of this Year Book.

A comparative statement of estimates of the incomes in various years from 1892 to 1926 is shown below:—

Year.	Net Income of Resident Individuals.	Undistributed Income of Local Companies, etc.	Income accruing to absentees.		Private Income derived in New South Wales.
			From Private Investments and Property.	From investment in Government Loans. †	
	£	£	£	£	£
1892	*	*	3,050,000	1,870,000	68,270,000
1898	57,649,000	2,250,000	2,530,000	1,975,000	64,404,000
1901	*	*	2,832,000	1,976,000	66,912,000
1914-15	102,100,000	*	*	3,100,000	114,100,000
1920-21	187,800,000	10,500,000	3,400,000	6,700,000	208,200,000
1925-26	234,000,000	16,500,000	3,500,000	8,100,000	262,100,000

\* Not available.

† Commonwealth and State.

The estimate of 1892 relates to a year in which the financial boom had reached its highest point and the income of that year was consequently inflated. In 1898 and 1901 the State was slowly recovering from an

industrial depression consequent on the financial crisis of 1893 and a succession of adverse seasons. The income of the year 1914-15 was affected by the dislocation caused by the outbreak of war and by the occurrence of a very bad season.

The decrease in the amount of income derived in the years 1898 and 1901 as compared with 1892 may be readily understood. The subsequent increase has been partly nominal owing to depreciation in the purchasing power of money, though it is certain that the growing prosperity of the community has had a very favourable influence.

The following table shows the number of persons deriving income, their proportion to the total population of the State, and the average amount of income derived per inhabitant and per person deriving income:—

Year.	Resident Persons receiving Income.	Proportion of Persons receiving Income to Total Population.	Average amount of Income per person receiving Income. †	Average amount of Income per Inhabitant. †	Proportion of Total Income received by Absentees.
	No.	Per cent.	£	£	Per cent.
1892	446,190	37·4	139·8	53·8	7·2
1898	534,315	40·4	112·1	45·6	7·0
1901	*	*	*	45·4	7·2
1914-15‡	788,600	41·7	138·2	57·3	*
1920-21	902,400	42·9	219·5	94·8	4·9
1925-26	995,200	42·5	251·7	108·0	4·4

\* Not available.

† Excluding absentees and their income.

‡ The figures for 1914-15 relate to the incomes of persons resident in, and companies with head offices in, New South Wales.

With the growth of population the number of persons receiving income has shown a very pronounced increase and its proportion to the total population has risen steadily. This is probably due, in part, to the increase in the employment of women in commercial and industrial occupations, but it is also a consequence, in part, of the increase in the proportion of adults in the population.

Existing data as to price levels are insufficient to enable a satisfactory measure of comparison to be made between the real income of post-war and earlier years, because of the difficulty of properly assessing the effect of the inflation of prices, which reached a maximum in 1920.

The foregoing estimates represent, as nearly as may be, the sum of the net incomes derived by private individuals and by companies from sources within New South Wales. As such they contain some duplication in respect of amounts paid from the proceeds of taxation to old-age, invalid and war pensioners and to bondholders in war and other Government loans. On the other hand, appreciable amounts of income derived by the various Governments from State lands, forests and mines and from governmental business enterprises are excluded from account.

## LOCAL GOVERNMENT

### GROWTH OF LOCAL GOVERNMENT.

THE first step towards Local Government in New South Wales may be said to have been taken in 1840, when the Parish Roads Act was passed, authorising proprietors of lands adjacent to or within 3 miles of parish roads to elect trustees, who were empowered to levy rates, establish tolls, and borrow money for making or repairing such roads and the bridges thereon. Particulars of the subsequent development will be found in the Year Book for 1922.

Local Government in New South Wales is conducted under the provisions of the Local Government Act of 1919 and its amendments, except in the City of Sydney, where it is regulated by the Sydney Corporation Act. Slight modification has been made in the system by the Main Roads Act and other laws. The system extends over the whole of the Eastern and Central Land Divisions of the State, with the exception of the Federal Capital Territory. The Murrumbidgee Irrigation Area also was excluded until the year 1928. The sparsely-populated Western Division, embracing two-fifths of the area of the State, is unincorporated, with the exception of the portions included in the municipalities of Bourke, Brewarrina, Broken Hill, Cobar, Wentworth, and Wilcannia, and parts of the municipalities of Balranald and Hillston which lie within its boundaries.

Local governing areas are of two main kinds, viz., municipalities and shires. At the end of 1935 there were 173 municipalities, including the City of Sydney, and their aggregate area was 1,370,340 acres. The smallest municipality is Darlington, a suburb of Sydney, with 54 acres, and the largest is Campbelltown, 64,526 acres. There were 139 shires, extending over an area of about 181,869 square miles. The smallest is Woy Woy, 49 square miles, which was separated from Erina Shire on 1st August, 1928. The largest is Lachlan, with headquarters at Condobolin, 5,883 square miles. By reason of amalgamation of areas, the number of municipalities declined from 181 in 1932 to 173 in 1935, and the number of shires increased by one to 139, when the Municipality of Central Illawarra was proclaimed a shire in 1934. County councils, constituted to perform specific services of joint benefit to constituent municipalities and shires, were four in number at the end of 1935.

In this chapter the particulars relating to the City of Sydney, municipalities and shires are shown conjointly in a summarised form and separately in greater detail. In making a distinction between the metropolitan and country districts, the metropolitan district, unless otherwise specified, is the area defined by Schedule IV of the Local Government Act of 1919. It embraces the municipalities of Auburn, Bankstown, Dundas, Ermington and Rydalmere, Granville, Lidcombe, and Parramatta, and the shires of Hornsby, Sutherland, and Warringah, in addition to the City of Sydney and forty-one suburban municipalities, including Ku-ring-gai, formerly a shire, which was proclaimed as a municipality as from 1st November, 1928.

#### *Sydney Corporation Acts.*

In terms of the Sydney Corporation Act of 1932-1934, consolidating an Act of 1902 and its amendments, the local government of the City of Sydney is vested in the City Council, which is composed of twenty aldermen, four for each of the five wards. The Lord Mayor is elected annually by the aldermen from their own number.

Elections are held every third year. In November, 1927, however, an Act was passed which placed the administration of the city in the hands of a temporary Commission until June, 1930, when a new council was elected for a term dating from 1st July, 1930, to 31st December, 1932. This term was extended by Act of Parliament to December, 1933, then to 30th June, 1934, and finally to 3rd December, 1934.

The functions of the Council, exercised during its term of office by the Commission, include the maintenance of the streets and other public ways of the city, though the traffic is regulated by the police. Similarly the Council is empowered to levy general, special, and street watering rates; to establish public markets; to regulate street selling, the erection of boardings, matters relating to public health and sanitation, and the inspection of food; to resume land for the purpose of remodelling or improving areas and for widening streets, etc.; to erect and let dwellings; to maintain free lending libraries; to control parks; and generally to make by-laws for the good government of the city.

The Council exercises authority to vote as a constituent council for one candidate at the election of members of the Board which administers the metropolitan water supply and sewerage services; and, at the triennial elections of members of the Board of Fire Commissioners of New South Wales, to vote at the election of one member to represent the City of Sydney and the councils of the suburban municipalities. Authority to generate and supply electricity for public and private uses, which has been exercised since 1904, was transferred on 1st January, 1936, to The Sydney County Council.

The right to be enrolled as a voter at elections of the City Council extends to adult British subjects by reason of (a) the ownership or (b) the occupation of property. The qualification of ownership is held by persons who own a freehold interest in possession of property of a yearly value of £5 and upwards in any ward, or a leasehold interest in property of a yearly value of £25 and upwards. A person with this qualification may be placed on the roll for every ward in which he is so qualified, but may not then be enrolled in any ward by virtue of any other qualification.

The qualification by reason of occupation is held in respect of a ward by those who have occupied continuously for a period of twelve months a house, shop, or other building of a yearly value of £26 in that ward, also by lodgers who have occupied lodgings of a yearly value of £26 for a period of twelve months continuously in the same dwelling-house in the ward. The period of residence in a ward for a person who, in the war, served outside Australia with the Commonwealth forces is three months. In the case of joint occupation as lodger or otherwise only one occupier may be placed on the roll for every £26 of the annual value of the premises. Any such person may be placed on the roll for one ward only, and if he has more than one such qualification he may choose the roll on which his name shall be placed.

Yearly value, in respect of qualification by occupancy, as stated above, means unfurnished value of property and lodgings. Where property or lodgings are let furnished, the unfurnished value is reckoned at four-fifths of amounts paid on an annual basis. The proportions applied to lodgings, whether furnished or unfurnished, when payments cover partial and full board, are three-fifths and two-fifths respectively.

Enrolment entitles the elector to one vote in each ward in which he is enrolled. Any person qualified to vote is eligible for election as an alderman unless disqualified under the provisions of the Sydney Corporation Act.

*System under Local Government Act.*

The Local Government Act of 1919 and its amendments, with ordinances thereunder, are administered by the Minister for Local Government and Secretary for Public Works, who is in charge of a State Department. Each municipality or shire is governed by a council, which is elected for a term of three years. A municipal council must consist of not less than six nor more than fifteen aldermen, and a shire council of not less than six nor more than nine councillors, each riding being represented by an equal number of councillors. Each municipal council elects a mayor annually from amongst its members, and each shire council a president. A council may pay to its members reasonable out-of-pocket expenses for travelling, and may pay an allowance to its mayor or president, but otherwise the services of aldermen and councillors are gratuitous.

Every adult natural-born or naturalised British subject of either sex is qualified to be enrolled as an elector, provided he or she is either a land-owner, a rate-paying lessee, or has been continuously for the three months preceding the day prescribed for enrolment an occupier of ratable land of the yearly value of £5 or upwards, or of land by virtue of a miner's right or business license, or is in occupation of Crown land and pays rent. By the Local Government (Amendment) Act, 1927, the franchise was extended to all adult residents of a ward or riding who had been residing there continuously for a period of six months, but in terms of a further amending Act, passed in 1934, the period of residence was extended to twelve months. Persons may be enrolled and may vote in respect of each ward or riding in which they are qualified as owners or as rate-paying lessees, but not more than once in respect of the same ward or riding. A person qualified as owner or as rate-paying lessee in a ward or riding who is qualified also as an occupier in another ward or riding of the same municipality or shire may not be enrolled under both qualifications. He may choose the ward or riding in which he desires to be enrolled, and failing due notice of his choice he is enrolled where he is qualified as owner or lessee. A person qualified as occupier in more than one ward or riding may be enrolled in one only.

Unless disqualified by the Act, every elector is qualified for a civic office. The powers of the councils are extensive; they were stated in detail in the 1922 issue of the Year Book at page 332.

A new municipality cannot be constituted unless its proposed area contains a population of 3,000 people with a density of one person per acre, and has an unimproved capital value which, when levied at the rate of 3d. in the £, yields a sum of £3,000. The union of existing municipalities or shires is not prevented by non-compliance with these requirements.

A municipality may be proclaimed under the Local Government Act as a city if it is an independent centre of population with an average population of at least 20,000 people, and has an average annual income of at least £20,000. Sydney, Armidale, Bathurst, Goulburn, Grafton, and Newcastle were proclaimed as cities under the Crown Lands Act in 1885, and Broken Hill was proclaimed under the Local Government Act in 1907.

In the shires, urban areas may be established upon proclamation by the Governor if the majority of the electors in the locality favour the project. In such cases the council of the shire exercises within each urban area the powers of the council of a municipality. Except in the shires of Hornsby, Sutherland, and Warringah, urban committees may be appointed to exercise within the urban areas certain powers of the council, and to expend money raised by a local rate levied by the council upon the request of the urban committee. In March, 1936, there were 27 such committees functioning.

In some cases boards or trusts have been constituted under special Acts to conduct operations which are regarded usually as belonging to the sphere of local government. A brief description of their activities is given later.

Provision is made for joint action by local governing bodies in regard to undertakings of magnitude or those which benefit more than one area. For such purposes county councils may be constituted in terms of the Local Government Act, or joint committees may be arranged under the ordinances.

Any group of local areas or of parts thereof may be constituted by proclamation as a county district, in which a county council, consisting of delegates from the areas concerned, exercises such powers as may be delegated to it. Where powers relating to the destruction of aquatic pests have been delegated, the county council may be assisted by subsidies from Consolidated Revenue, if the funds be voted by Parliament. The subsidies are payable in six half-yearly instalments, viz., for the first and second half-years, £1 for every £1 of revenue collected for the destruction of aquatic pests; for the third and fourth half-years respectively, 15s.; for the fifth and sixth, 10s.

At the end of 1935 four county districts were in existence. The St. George county district embraces the municipalities of Bexley, Hurstville, Kogarah, and Rockdale. It was formed for the purpose of establishing an electric lighting service.

The Richmond River county district consists of the municipalities of Ballina, Casino, and Lismore, the shires of Gundurimba, Terania, Tintenbar, and Tomki, and parts of Byron, Copmanhurst, Kyogle, and Woodburn shires. It was established for the eradication of the water hyacinth pest.

The Clarence River county district comprises the municipalities of Grafton, South Grafton, and Ulmarra, and the shires of Copmanhurst (part only), Nymboida, and Orara. It was constituted principally for the purpose of carrying out the Nymboida hydro-electric scheme.

The Eastern Riverina county district includes the shires of Gundagai, Holbrook, Illabo, Kyeamba and Tumbarumba, and undertakes the destruction of noxious weeds. It was incorporated in 1934.

The Sydney County District, constituted in terms of the Gas and Electricity Act, 1935, comprises thirty-three local governing areas supplied directly with electricity by the Municipal Council of Sydney. The electricity undertaking of the Municipal Council of Sydney was transferred to the Sydney County Council on 1st January, 1936.

#### *Extent of Local Government.*

Prior to 1906, when the shires were constituted, the extent of the local governing areas was only 2,830 square miles. At the end of 1935 the incorporated area was about 184,000 square miles, or nearly 60 per cent. of the total area of the State (309,432 square miles). The population in municipalities and shires as at 31st December, 1935, was 2,633,360, or 99 per cent. of the total population.

The area, population, and unimproved capital value of ratable property in the incorporated areas as at 31st December, 1935, are stated below:—

Local Areas.	Area.	Population.	Unimproved Capital Value. †
<b>Metropolitan Area—</b>	<b>acres.</b>	<b>No.</b>	<b>£</b>
City of Sydney .. .. .	3,220	87,570	45,891,051
Other Municipalities .. .. .	151,444	1,158,560	90,946,422
Shires .. .. .	283,700	54,300	7,313,594
<b>Total, Metropolitan* .. ..</b>	<b>438,364</b>	<b>1,300,430</b>	<b>144,151,067</b>
<b>Country—</b>			
Municipalities .. .. .	1,215,676	576,020	30,216,525
Shires .. .. .	116,112,640	756,910	131,704,548
<b>Total, Country .. .. .</b>	<b>117,328,316</b>	<b>1,332,930</b>	<b>161,921,073</b>
<b>Grand Total .. .. .</b>	<b>117,766,680</b>	<b>2,633,360</b>	<b>306,072,140</b>

\* Schedule IV, Local Government Act, 1919. † Excluding Federal Government and other non-ratable properties.

The area of the country shires as shown above excludes 28 square miles of Federal Territory at Jervis Bay, and the Federal Capital Territory, containing an area of 912 square miles.

The improved capital value of ratable property in the City of Sydney, as at 31st December, 1935, was £139,586,700, and the assessed annual value £6,293,552. In the other municipalities included in the metropolitan area, as defined by Schedule IV of the Local Government Act, the improved capital value was £271,062,229 and the assessed annual value £19,805,094. In the three shires in the metropolitan area the corresponding values were improved £17,352,724, and assessed £1,066,760, so that the improved capital value of the metropolitan area was £428,001,653 and the assessed annual value £27,165,406. In the country municipalities the improved value was £104,048,840, and the assessed annual value £8,026,068. Similar particulars are not available for the country shires.

The financial position of the municipalities and shires in 1935 was as follows:—

Local Areas.	Total Revenue.			Total Expenditure.	Total Liabilities.	Total Assets.
	Rates Levied.	Other.	Total.			
<b>Metropolitan Area—</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>
City of Sydney ... ..	983,451	2,912,908	3,896,359	3,813,464	27,418,739	30,730,706
Other Municipalities ... ..	1,963,988	1,643,409	3,607,397	3,330,876	6,146,593	3,974,531
Shires ... ..	152,187	328,099	480,286	435,398	943,190	830,936
<b>Total, Metropolitan* ... ..</b>	<b>3,099,626</b>	<b>4,884,416</b>	<b>7,984,042</b>	<b>7,579,738</b>	<b>34,508,522</b>	<b>35,536,263</b>
<b>Country—</b>						
Municipalities ... ..	1,081,321	2,948,898	4,030,219	3,565,057	7,645,234	11,815,857
Shires ... ..	1,142,239	2,820,530	3,962,769	3,896,504	1,815,984	3,127,919
<b>Total, Country ... ..</b>	<b>2,223,560</b>	<b>5,769,428</b>	<b>7,992,988</b>	<b>7,461,561</b>	<b>9,461,218</b>	<b>14,943,776</b>
<b>Grand Total ... ..</b>	<b>5,323,186</b>	<b>10,653,844</b>	<b>15,977,030</b>	<b>15,041,299</b>	<b>43,969,740</b>	<b>50,480,039</b>

\* Schedule IV, Local Government Act, 1919.

The revenue shown under "Other" is derived mainly from business undertakings, such as electricity services, etc., and includes substantial sums received from the State Government. Particulars of these and of the operations of individual councils are published annually in the Statistical Register of New South Wales, and more complete details in summarised form are quoted on later pages. The revenue and expenditure shown above include the main roads and harbour bridge rates, collected by the councils for the authorities administering the main roads and the Harbour Bridge.

## VALUATION OF PROPERTY IN LOCAL AREAS.

The revenue of local governing bodies is derived substantially from the taxation of land and, to a minor extent, improvements thereon, and as the rates of taxation may be levied on the unimproved, improved, or annual value, it is necessary that periodic valuations be made of all ratable property. The valuations are made at intervals not exceeding three years, and prior to the enactment of the Valuation of Land Act in 1916 they were made by valuers appointed by the councils. This system had remained in operation for many years without any centralised control to secure uniformity, but the Act of 1916 made provision for the valuation of the lands of the State by the Valuer-General. The Act prescribed that rates and taxes based on land values must be levied on the values determined by the Valuer-General, and that the power of a council to assess values ceased when the Valuer-General delivered a valuation list. A council may, however, ask the Valuer-General to re-value any land which it considers has not been valued correctly, and pending action by the Valuer-General the valuations are made by the council's assessors as formerly. Valuations either by the Valuer-General or the councils' valuers are subject to review on appeal to the Land and Valuation Court, described in the chapter of this Year Book relating to Law Courts.

This system was modified by the Local Government Act, 1924, to provide that the council of a shire, other than the Blue Mountains Shire or any shire wholly or partly within the County of Cumberland, may decide whether the valuation should be made by the Valuer-General under the Valuation of Land Act, 1916, or by a valuer appointed by the council.

In municipalities the valuation must show the unimproved capital value, the improved capital value, and the assessed annual value of ratable property. In the shires the law requires the valuation of the unimproved capital value only, the determination of the improved capital value and of the assessed annual value being optional, except in urban areas, in which the assessed annual value must be determined. The Valuer-General usually determines such values for shires within his jurisdiction.

The unimproved capital value is defined, in both the Local Government Act and the Valuation of Land Act, as the amount for which the *fee-simple* estate in land could be sold under such reasonable conditions as a *bona-fide* seller would require, assuming that the actual improvements had not been made.

The Valuer-General's valuations cover all land except Commonwealth properties, reserves, parks, etc., and unoccupied Crown lands, and the values are on a freehold basis. For purposes of rating, however, the unimproved capital value of Crown lands occupied as pastoral or agricultural holdings is twenty times the rent payable to the Crown during the year preceding the assessment. After the expiry of ten years of the term of leases, lands leased from the Crown with right of conversion to freehold are rated on thirty times the annual rental paid.

As an alternative method of valuation a council, at its discretion, may direct that the unimproved capital value of mines be ascertained upon the basis of output, as follows:—

- (1) *Coal and Shale Mines*.—A sum equal to 3s. per ton of large coal and shale, and 1s. 6d. per ton of small coal, on the average annual output during the preceding three years.
- (2) *Other Mines*.—A sum equal to 20 per cent. of average annual value of ore or mineral won during the preceding three years.

In the case of idle or undeveloped mines the unimproved capital value may be calculated by multiplying the annual rental, if any, by twenty.

The improved capital value is the amount for which the *fee-simple* estate of the land, with all improvements and buildings thereon, could be sold.

The assessed annual value is nine-tenths of the fair average rental of land, with improvements thereon, but must not be less than 5 per cent. of the improved capital value.

In 1931 Crown lands in the City of Sydney were ratable whether built upon or not, and the following properties were exempt, viz., lands vested in and used for the University or any of its colleges; lands vested in the Railway Commissioners or in the Metropolitan Water, Sewerage and Drainage Board; the Sydney Harbour Trust lands unless leased for private purposes; lands vested in trustees for purposes of public recreation, health, or enjoyment; hospitals, benevolent asylums, or other buildings used solely for charitable purposes; buildings used solely for public worship; State schools and schools certified under the Public Instruction Act, and playgrounds in connection therewith.

In terms of the Rating (Exemption) Act, 1931, which commenced on 1st January, 1932, all Crown lands have been exempted from rating except those leased for private purposes or used in connection with a State industrial undertaking. By the same Act the exemption of church and school lands was extended to embrace all lands belonging to religious bodies occupied solely by clergymen or official heads of religious bodies or used for religious teaching or training; all State schools and those certified under the Public Instruction Act or registered under the Bursary Endowment Act, and playgrounds and teachers' and caretakers' residences belonging to or used in connection with these schools. The provisions of earlier Acts relating to rating were consolidated by the Sydney Corporation Act, 1932-34.

The underground mains of the gas and hydraulic power companies are ratable. Properties of the Commonwealth Government are not ratable, though a contribution is made to the funds of the Council in respect of part of them.

In municipalities and shires under the Local Government Act all lands, including areas vested in the Railway Commissioners and the Sydney Harbour Trust, were ratable in 1931 except the following:—Lands vested in the Crown or public body or trustees and used for public cemeteries, commons, reserves, or free libraries; lands used for public hospitals, public benevolent institutions, or public charities, or for the University of Sydney or a college thereof; Crown lands which are not occupied or are occupied only by public works in course of construction; church lands belonging to religious bodies, used for public worship, or solely as the clergyman's residence; public roads, streets, wharves, etc.; lands belonging to and used for schools registered under the Bursary Endowment Act, or certified under the Public Instruction (Amendment) Act, 1916, including playgrounds belonging to and used in connection with such schools. As from the beginning of the year 1932 Crown lands and church and school properties in areas under the Local Government Act were exempted by the Rating (Exemption) Act, 1931, under the same conditions as in the City of Sydney (see above). Where water is supplied or sewerage or drainage services are rendered, a charge or fee may be imposed in respect of properties thus exempted from rating.

In the following table are shown the aggregate valuations used for assessing rates on ratable property and the value of improvements in local government areas in the year 1935. Complete data as to the value of improvements in shires are not available as only a few of the country shires record the improved capital or assessed annual value, but for the purpose

of completing the table, it has been assumed that in the aggregate, improvements in country shires are equal to the unimproved value.

Division	Unimproved Value of Ratable Land.			Value of Improvements on Ratable Land.		
	Total. †	Average Per Head.	Average Per Acre.	Total. †	Average Per Head.	Average Per Acre.
<b>Metropolitan—</b>	£000	£	£ s.	£000	£	£ s.
City of Sydney ...	45,891	524	14,251 18	93,696	1,070	29,098 0
Other Municipalities	90,946	78	600 10	180,116	155	1,189 6
Shires ...	7,314	135	25 16	10,039	185	35 8
<b>Total, Metropolitan</b>	<b>144,151</b>	<b>111</b>	<b>328 17</b>	<b>283,851</b>	<b>218</b>	<b>647 10</b>
<b>Country—Municipalities</b>	<b>30,216</b>	<b>52</b>	<b>24 17</b>	<b>73,832</b>	<b>128</b>	<b>60 15</b>
<b>Shires ...</b>	<b>131,705</b>	<b>174</b>	<b>1 3</b>	<b>‡131,705</b>	<b>174</b>	<b>1 3</b>
<b>Total Incorporated Areas ...</b>	<b>306,072</b>	<b>116</b>	<b>2 12</b>	<b>489,388</b>	<b>186</b>	<b>4 3</b>

† Federal Government and other non-ratable properties are excluded.

‡ Estimated.

Lands leased from the Crown and assessed on a capitalised rental basis are included above at such capitalised value.

The unincorporated portion of the Western Division contains about 80,000,000 acres, of which 77,000,000 acres are pastoral or agricultural lands held under lease from the Crown at annual rentals. The unimproved capital value of these leaseholds assessed at twenty times the annual rent payable to the Crown would not exceed £3,000,000.

A comparative summary of the unimproved and improved capital values, and the assessed annual value of ratable property, excluding lands coming within the exemptions noted above, is shown in the following statement.

The valuations exclude the values of Federal and other non-ratable properties and the value of underground mains laid by gas and hydraulic power undertakings which, in the city, are ratable on the basis of length.

At 31st December.	Metropolitan.				Country.		Total.
	City of Sydney.	Other Muni- cipalities.	Shires.	Total.	Muni- cipalities.	Shires.	
	£000.	£000.	£000.	£000.	£000.	£000.	£000.
<b>Unimproved Capital Value.</b>							
1921	35,887	57,291	4,875	98,053	27,005	123,398	248,456
1925	45,656	80,253	6,840	132,749	31,894	137,585	302,228
1929	60,983	110,157	9,089	180,229	40,214	157,569	378,012
1930	60,896	118,852	10,218	189,966	40,673	158,636	380,275
1931	56,961	118,250	10,224	185,435	40,786	152,516	378,737
1932	48,910	100,556	8,713	158,209	34,766	140,136	333,111
1933	48,930	94,174	7,848	150,952	32,213	135,852	319,017
1934	45,979	91,681	7,689	145,349	30,699	134,100	310,148
1935	45,891	90,946	7,314	144,151	30,216	131,705	306,072
<b>Improved Capital Value.</b>							
1921	99,647	156,849	†9,750	266,246	74,565	++	++
1925	151,367	233,913	†13,412	398,692	96,327	++++	++++
1929	193,989	309,864	†17,998	521,851	123,653	++++	++++
1930	221,857	330,381	20,484	572,722	128,768	++++	++++
1931	192,194	334,391	20,659	547,244	131,553	++++	++++
1932	154,595	294,576	18,913	468,084	114,959	++++	++++
1933	143,791	280,854	17,826	442,471	109,026	++++	++++
1934	137,272	275,461	17,788	430,521	104,911	++++	++++
1935	139,587	271,062	17,353	428,002	104,049	++	++
<b>Assessed Annual Value.</b>							
1921	4,484	10,718	†614	15,816	5,355	++	++
1925	6,811	17,535	†845	25,191	7,324	++++	++++
1929	8,344	23,676	†1,134	33,154	9,690	++++	++++
1930	9,554	25,246	1,300	36,100	10,310	++++	++++
1931	8,253	25,690	1,306	35,249	10,278	++++	++++
1932	6,464	21,868	1,176	29,508	8,942	++++	++++
1933	6,471	20,400	1,090	27,961	8,362	++++	++++
1934	6,146	19,909	1,090	27,145	7,982	++++	++++
1935	6,294	19,805	1,067	27,166	8,026	++	++

† Partly estimated.

‡ Not available.

The marked increase in values during the period 1921 to 1930 was in part attributable to the new basis of valuation adopted by the Valuer-General in a growing number of areas which had been assessed previously by valuers appointed by the councils. The increase up to 1930 in unimproved values was greatest in suburban municipalities and shires, being 103 per cent. of the values in 1921 as compared with 70 per cent. in the City of Sydney and 33 per cent. in country districts. Improved capital values showed even greater relative growth in the districts for which they were collected, the ratios being 123 per cent. in the City of Sydney and 111 per cent. in other districts situated within the metropolitan area.

In 1931 and 1932 values declined sharply, being affected by adverse economic conditions, and they continued to decline, but at a diminishing rate, in subsequent years in which there was a steady recovery of business and investment activity. Slight irregularity from year to year between the different areas was due partly to time necessarily taken in completing the work of revaluation.

The ratio of assessed annual value to improved capital value in 1935 was 4.5 per cent. in the City of Sydney, 7.3 per cent. in other metropolitan areas, and 7.7 per cent. in country municipalities. As the assessed annual value is nine-tenths of the actual annual value, the proportions per cent. of annual value to improved value were 5 per cent., 8.1 per cent., and 8.5 per cent., respectively.

It is the practice in the City of Sydney to derive the aggregate improved capital value of properties by capitalising the fair average rental at 5 per cent. For this reason the ratio of the assessed annual to the capital values of city properties is lower than the ratios for properties in suburban and country municipalities.

Variations in value of improvements, ascertained by deducting the unimproved from the improved values, are indicated hereunder at intervals since 1921:—

Areas.	Value of Improvements on Ratable Lands					
	1921.	1930.	1931.	1933.	1934.	1935.
<b>Metropolitan—</b>	£000	£000	£000	£000	£000	£000
City of Sydney ... ..	63,760	160,961†	135,233	94,861	91,293	93,696
Other Municipalities ..	99,558	211,529	216,141	186,680	183,780	180,116
Shires*... ..	4,875	10,266	10,435	9,978	10,099	10,039
Total, Metropolitan ...	168,193	382,756	361,809	291,519	285,172	283,851
<b>Country Municipalities</b> ...	47,560	88,095	90,767	76,813	74,212	73,832
Total Municipalities and Metropolitan Shires ...	215,753	470,851	452,576	368,332	359,384	357,683

\* Hornsby, Sutherland, and Warringah Shires.

† Based on unimproved values assessed in 1927, and improved values assessed in 1930.

### *Valuations by the Valuer-General.*

Up to the end of June, 1936, valuations had been issued by the Valuer-General in respect of 169 municipalities and shires. All the districts in the county of Cumberland have been valued by the Valuer-General except the City of Sydney. The assessments are made under the Valuation of Land Act, which provides that all lands shall be valued on a freehold basis, and that all lands shall be valued except those owned by the Commonwealth Government, unoccupied lands owned by the State Government, and Crown reserves, parks, etc. When preparing the rate books of the council,

adjustments are made to provide for the exclusion of non-ratable properties and for the difference between the value of the fee-simple and the capitalised-rent value of leases held from the Crown.

It is the usual practice to revise the valuations triennially, but in view of marked instability of real property values during the years 1931 to 1933 many valuations were revised at shorter intervals.

#### RATING BY LOCAL GOVERNING BODIES.

As well as the City of Sydney, and municipalities and shires operating under the Local Government Act, special boards constituted to administer water, sewerage and drainage works levy rates within the areas served by them. The amount of rates levied by these boards and the councils during each of the past five years is shown on pages 45 and 46 of this Year Book, where local rating is considered conjointly with other forms of taxation imposed in the State.

Levies by councils include rates for general, special and local purposes, the payment of interest and instalments of principal on loans, and meeting contributions to the Government on account of the Harbour Bridge and main roads. The total amount of such rates levied by the City of Sydney, municipalities and shires in various years since 1921 are shown in the following table, which is dissected to indicate the purposes for which the rates were levied; *i.e.*, ordinary services, trading, and water and sewerage undertakings. In this respect "Ordinary Services" includes rates levied for the purposes of the general fund, also special and local rates imposed in relation to functions which are similar to those of the general fund; *e.g.*, roads, health, street lighting, etc.

Year ended 31st December.	Rates Levied.					
	Ordinary Services.	Electricity Fund.	Gas Works Fund.	Water Supply Fund.	Sewerage Fund.	Total.
	£	£	£	£	£	£
1921	3,461,477	23,535	4,698	111,767	36,305	3,637,782
1926	4,795,417	88,781	5,126	156,646	46,529	5,092,499
1929	6,127,780	95,078	5,386	222,425	68,103	6,518,775
1930	6,416,196	92,669	4,354	238,037	80,866	6,832,122
1931	5,829,864	86,326	4,631	251,901	81,955	6,254,680
1932	5,238,107	70,917	4,137	242,505	87,964	5,643,630
1933	4,994,470	64,894	3,135	249,438	83,691	5,395,628
1934	4,917,642	54,425	2,016	256,925	95,139	5,326,147
1935	4,920,632	51,154	2,292	248,828	100,280	5,323,186

The total amount of rates levied in the City of Sydney, in suburban and country municipalities and in the shires may be obtained by reference to succeeding tables. The amount per head of population within the whole of the incorporated area was £1 14s. 5d. in 1921; it increased to £2 14s. 11d. in 1930 and then declined to £2 0s. 5d. in 1935. The amounts per head of population within the metropolitan municipalities, including City of Sydney, the country municipalities and the shires were respectively £1 18s. 8d., £1 11s. 1d. and £1 10s. 7d. in 1921; £3 0s. 1d., £2 9s. 9d. and £2 9s. 6d. in 1930; and £2 7s. 5d., £1 17s. 8d. and £1 12s. 2d. in 1935.

#### *City of Sydney—Rating.*

In 1916 the City Council adopted the principle, embodied in the Local Government Act of 1906, of levying rates for general expenditure upon the unimproved value. Formerly the rates had been levied on the annual rental, with an additional rate since 1909 on the improved capital value. A general rate of not less than one penny in the £ on the unimproved

capital value must be levied and a city rate not exceeding 2s. in the £ on the assessed annual value may be levied. The limit of rating is fixed by the amount which would be yielded by a rate of 3d. in the £ on the unimproved capital value and a rate of 2s. in the £ on the assessed annual value. Where no city rate is levied, the maximum rate is fixed at 6d. in the £ on the unimproved capital value. The removal of the exemption from rating of Crown Lands, greatly modified as from 1st January, 1932, was made in 1916, and the council was authorised to collect rents in respect of gas and hydraulic mains, etc., in the streets, which cannot be assessed on the basis of unimproved value.

Rates were first levied in respect of the Sydney Harbour Bridge in 1923 and on account of contributions to the funds of the Main Roads Department in 1925. A Harbour Bridge rate of  $\frac{1}{4}$ d. in the £ of unimproved capital value, struck in the years 1923 to 1932 inclusive, was reduced to  $\frac{1}{8}$ d. in the years 1933 to 1935, and thence to  $\frac{2}{9}$ d. in 1936 and subsequent years. The main roads levy was at the rate of  $\frac{1}{4}$ d. in the £ from 1925 to 1932 and  $7/32$ d. in 1933 and succeeding years.

The following table shows the rates struck and the total amounts levied by the City Council annually since 1925:—

Year.	City Fund.		Main Roads Rates.	Harbour Bridge Rates.	Total Rates Levied.
	Rate struck in the £ on U.C.V.	Total Amount Levied.			
	pence.	£	£	£	£
1925	3½	652,397	‡46,600	93,199	792,196
1926	3½	655,921	46,201	93,246	795,368
1927	3½	*826,287	63,537	127,058	1,016,882
1928	3½	842,463	63,724	127,447	1,033,634
1929	‡3½	†896,005	63,107	126,270	1,085,382
1930	‡3½	†959,400	63,068	126,310	1,148,778
1931	3½	904,769	59,273	118,888	1,082,930
1932	4½	906,628	48,920	98,990	1,054,538
1933	4½	911,381	43,010	66,048	1,020,439
1934	4½	880,885	41,640	63,387	985,912
1935	4½	878,500	41,593	63,358	983,451

\* Includes £4,906 other rates.

† Excluding  $\frac{1}{4}$ d. in the £ for Main Roads included in City Fund Rate in 1929 and 1930.

‡ Approximate.

The City Fund rate struck in 1935 was  $4\frac{1}{2}$ d. in the £, which, with levies in respect of the Harbour Bridge and main roads, as indicated above, made a total of 5 5-96d. in the £.

#### *Suburban and Country Ratings.*

Suburban and country municipalities may levy rates of four kinds, viz., general, special, local, and loan rates, and certain of them may be required to levy special rates in respect of main roads and the Sydney Harbour Bridge. A general rate of not less than 1d. in the £ must be levied on the unimproved capital value, but if this minimum rate is more than sufficient to meet the requirements of the area the Governor may allow the council to levy a lower rate. The maximum amount leviable in a municipality is limited as follows:—(a) For the general rate alone—the amount yielded by a rate of 2d. in the £ on the unimproved capital value and 1s. 6d. on the assessed annual value taken together; (b) the total of all rates (except water local and sewerage local rates) the yields of 2d. on the unimproved capital value and 2s. on the assessed annual value; (c) water

local rate alone or sewerage local rate alone, the yield of 2s. in the £ on assessed annual value of land ratable to the local fund. A general rate exceeding 3d. in the £ on unimproved capital value may not be levied in municipal areas upon a mine worked for minerals other than coal or shale. In special cases where the rate as stated above would yield less than the amount required for the purposes of the rate, the Governor may alter the limit by proclamation.

By an amending Act passed in 1934, provision was made for the levy within municipalities situate wholly outside the County of Cumberland of differential general rates in respect of urban farm lands and other lands. Urban farm land is defined to mean ratable land which is valued as one assessment, exceeds 5 acres in area and is used by the occupier for pastoral, dairying, fruit-growing or agricultural, etc., purposes. The maximum general rate which may be levied thereon may not exceed (a) one-half of the general rate levied on other lands in the municipality, or (b) the general rate levied by an adjoining shire, whichever is the greater. The Governor may by proclamation extend the operation of this provision to municipalities situate wholly or partly within the County of Cumberland.

The first year in which the general rate was levied on the unimproved capital value was 1908, and now, with few minor exceptions, the unimproved capital value forms the basis on which are levied special, local and loan rates.

The following table shows for various years since 1908 the unimproved capital value, rates levied and rates and extra charges on overdue rates collected in metropolitan (excluding City of Sydney) and country municipalities:—

Year.	Unimproved Capital Value.	Rates Levied.		Rates and Extra Charges Collected.		
		Amount.	Average per £ of U.C.V.	Amount.	Ratio to—	
					Rates and Charges Levied.	Rates and Charges Collectable.
<b>METROPOLITAN MUNICIPALITIES (Excluding Sydney).</b>						
	£000.	£	d.	£	Per cent.	Per cent.
1908...	25,210	350,324	3-34	346,766	98-55	85-25
1916...	37,331	685,625	4-41	682,323	99-00	90-73
1921...	54,730	1,140,720	5-00	1,148,855	99-81	91-45
1926...	80,942	1,834,838	5-44	1,838,125	99-39	92-17
1929...	110,157	2,483,550	5-41	2,500,345	99-84	91-95
1930...	118,852	2,641,953	5-34	2,501,113	93-59	86-51
1931...	118,250	2,497,057	5-07	2,131,131	83-60	72-51
1932...	100,586	2,132,553	5-09	2,009,476	92-03	67-17
1933...	94,174	2,016,141	5-14	1,969,055	95-02	64-47
1934...	91,681	1,970,006	5-16	2,058,392	101-59	66-16
1935...	90,946	1,963,988	5-18	2,071,590	102-80	67-52
<b>COUNTRY MUNICIPALITIES.</b>						
	£000.	£	d.	£	Per cent.	Per cent.
1908...	18,695	268,736	3-45	267,495	99-12	71-25
1916...	20,767	432,929	5-00	428,954	98-37	80-77
1921...	27,005	715,261	6-36	717,871	98-89	83-28
1926...	34,028	987,436	6-96	988,320	98-90	85-95
1929...	40,215	1,270,305	7-58	1,245,238	96-72	83-76
1930...	40,673	1,321,861	7-80	1,236,658	91-93	77-94
1931...	40,786	1,254,632	7-38	1,093,373	85-01	66-82
1932...	34,766	1,149,247	7-93	1,072,892	90-85	62-24
1933...	32,213	1,094,224	8-15	1,058,248	93-81	59-49
1934...	30,699	1,088,795	8-51	1,112,446	99-09	60-35
1935...	30,216	1,081,321	8-59	1,138,239	102-12	61-67

The amount of rates levied increased in both metropolitan and country municipalities until 1930, then declined in each year. The increase was due partly to higher rating, and partly to a rapid appreciation of unimproved capital values, especially in the metropolitan area. The slight increase in the average rate levied in recent years was due to a sudden decline in unimproved values. Because of delay in revaluations, the movement in values cannot be regarded as an index of development or economic fluctuations from year to year, though valuable in this respect over longer periods.

Whereas in early years the general rate accounted for the bulk of rating by municipal councils, the gradual expansion of trading functions, water, sewerage and other special and local works and services, has resulted in an increase of other rates. Rates other than general rates amounted to £12,344 in 1908, £117,284 in 1921, £328,460 in 1926, £405,433 in 1933, and £318,873 in 1935, in metropolitan municipalities, and £59,606, £230,365, £382,321, £482,930, and £469,672 respectively in country districts.

The amount of rates levied represents the amount taken to account by councils as revenue, after deductions from current assessments in respect of reductions of valuations on appeals and amounts written off as irrecoverable. Until the advent of the depression all but a small proportion of the rates levied and extra charges in the form of interest on overdue rates was collected in each year. In 1930 and 1931 the proportion of collections to levies declined substantially, but marked recovery was experienced in 1932 and following years as economic activity revived. The higher ratios since 1931, and especially in 1934 and 1935, were due in part to collections of arrears of rates, while the continued decline in the amount of rates levied has tended to emphasise movements in the ratio.

The more serious decline in the ratio of rates and charges collected to those collectable was due to the substantial increases in outstanding rates and charges carried forward in each of the last few years. The amounts were £218,935 at the end of 1929, £390,095 in 1930, £808,061 in 1931, £981,983 in 1932, £1,085,113 in 1933, £1,052,823 in 1934, and £996,476 in 1935, in the metropolitan area, and £241,487, £350,051, £542,839, £650,894, £720,719, £730,959, and £707,281 respectively in country municipalities. It is noteworthy that arrears of rates decreased during 1934 by £32,290 in metropolitan municipalities, and during 1935 by £56,347 in metropolitan and £23,678 in country municipalities.

### *Shire Ratings.*

In the shires the rates which may be levied are similar to those in municipalities. They are levied upon the unimproved capital value except in a few cases where a small special rate has been imposed on the improved value. The minimum general rate is the same as in the municipalities and the maximum amounts leviable are as follow :—(a) For the total of the general rate only—the sum yielded by a rate of 2d. in the £ on the unimproved capital value of all ratable land in the shire; (b) for the total of all rates in urban areas (other than general, water local, and sewerage local) the yield of 2s. in the £ on the assessed annual value of ratable land in the urban area; (c) the total of water local alone or sewerage local alone, the yield of 2s. in the £ on assessed annual value. As in municipalities the limits may be altered by proclamation if after inquiry it appears that the limit is less than is needed for the purposes of the rate.

Particulars relating to rates levied and collected in the shires in various years since 1907, the first year the shires were in operation, are shown in the following table:—

Year.	Unimproved Capital Value.	Rates Levied.		Rates and Extra Charges Collected.		
		Amount.	Average per £ of U.C.V.	Amount.	Ratio to—	
					Rates and Charges Levied.	Rates and Charges Collectable.
	£000.	£	d.	£	Per cent.	Per cent.
1907 ...	81,527	287,635	0·85	226,678	78·81	78·81
1916 ...	105,698	651,437	1·48	654,434	100·10	92·30
1921 ...	130,834	1,034,147	1·90	1,031,688	98·86	90·58
1926 ...	154,614	1,474,857	2·29	1,476,534	99·11	88·38
1929 ...	166,658	1,679,538	2·42	1,664,788	98·01	85·98
1930 ...	168,854	1,719,530	2·44	1,585,702	90·69	78·50
1931 ...	162,740	1,420,061	2·09	1,241,198	85·02	65·53
1932 ...	148,849	1,307,292	2·11	1,250,147	93·10	62·64
1933 ...	143,700	1,264,824	2·11	1,255,304	96·41	61·30
1934 ...	141,789	1,281,434	2·17	1,277,324	96·79	60·48
1935 ...	139,018	1,294,426	2·23	1,325,591	99·48	61·16

The level of rating increased until 1930, higher valuations being accompanied by an increase in the average rate per £ of unimproved capital value. The amount of rates levied declined substantially in 1931, both as a consequence of decreased valuations and the levy of a smaller rate per £. Thereafter unimproved values declined to a greater extent than the total amount of rates levied, which increased moderately after 1933, with the result that the average rate in the £ rose slightly.

Rates other than general rate increased from £17,464 in 1916, to £74,701 in 1921, to £214,239 in 1926 and to £244,553 in 1935, while outstanding rates and extra charges at the end of 1928 and each succeeding year amounted to £237,612, £271,375, £434,216, £652,969, £745,606, £792,401, £834,804, and £841,730.

#### *Main Roads and Harbour Bridge Rates.*

In terms of the Sydney Harbour Bridge Act and the Main Roads Act the councils of certain municipalities and shires are required to contribute towards the cost of the Harbour Bridge and works performed by the Main Roads Department, on the basis of a rate on the unimproved capital value of ratable properties.

The contribution in respect of the Sydney Harbour Bridge, first levied in 1923, was at the rate of  $\frac{1}{4}$ d. in the £ of unimproved capital value. In respect of the contribution for 1933, the rate was reduced by one-third to  $\frac{1}{6}$ d., and this rate prevailed until a further reduction of one-third to  $\frac{1}{8}$ d. became operative on 1st January, 1936. For main roads the rate of contribution for the years 1925 to 1932 was  $\frac{1}{4}$ d. in the £ of unimproved values, except on land used for agricultural or pastoral purposes or situated within the City of Sydney, on which the rate was  $\frac{1}{2}$ d. in the £. In 1933 the rates of contribution for the main roads were reduced to  $\frac{7}{16}$ d. and  $\frac{7}{32}$ d. in the £ of unimproved capital value respectively.

Revenue to meet these charges is derived by councils either by the levy of a special rate or by provision in the general rate, and the amounts stated below are included in the particulars of rates levied, which have been quoted in the preceding pages

Year.			Contributions by City of Sydney, Municipalities and Shires for—		
			Sydney Harbour Bridge.	Main Roads.	Total.
			£	£	£
1924	...	...	138,726	...	138,726
1925	...	...	141,681	242,563	384,244
1926	...	...	146,799	257,724	404,523
1927	...	...	182,671	286,602	469,273
1928	...	...	191,056	308,447	499,503
1929	...	...	192,543	328,252	520,795
1930	...	...	194,054	348,692	542,746
1931	...	...	186,639	344,187	530,826
1932	...	...	156,332	287,781	444,113
1933	...	...	101,587	239,519	341,106
1934	...	...	99,261	233,719	332,980
1935	...	...	98,234	232,170	330,404

#### *City of Sydney Finances.*

The City Council conducts its affairs under the Sydney Corporation Acts and is not bound by the provisions of the Local Government Acts. Its accounts are kept on a revenue and expenditure basis, thereby showing the income accrued and expenditure incurred during the period to which they relate. There are, however, vital differences between the form of its accounts and those of other local bodies, which make it desirable that the particulars of financial operations in the City Council be shown separately. The differences relate chiefly to the charging of expenditure to revenue and capital, and reference should be made to the description on page 181 of the procedure adopted by councils operating under the Local Government Act.

In the accounts of the City Council contributions to sinking funds for the repayment of loans are charged against ordinary revenue, whilst expenditure from loan funds on works, such as roads, streets, bridges, etc., is capitalised.

The rates and other city revenues are paid into, and the expenses not otherwise provided for are defrayed out of the City Fund. Receipts and disbursements relating to the public markets, and to resumptions of land, etc., are recorded separately, though these accounts form part of the City Fund. The financial operations of the city electricity undertaking constitute a separate account.

The following is a statement of the expenditure and income of the various funds of the City of Sydney during 1934 and 1935, showing for the City Fund objects of expenditure and sources of income. Main roads and Harbour Bridge rates, though not usually regarded as forming part of the City Council's finances, are included in the table.

Particulars.	Year ended 31st December, 1935.				Year ended 31st Dec., 1934
	Public Markets.	Resumptions.	Other.	Total.	
EXPENDITURE.	£	£	£	£	£
<b>City Fund—</b>					
Salaries and wages ...	23,067	3,655	334,437	361,159	339,341
Stores and sundries ...	17,665	17,065	111,040	145,770	127,140
Insurance and rates ...	18,525	36,399	17,057	71,981	81,533
Electricity ...	4,102	635	30,347	35,084	47,038
Interest ...	53,141	316,398	109,411	478,950	567,907
Sinking Fund ...	24,065	71,817	41,593	137,475	142,145
<b>Total, City Fund</b>	<b>140,565</b>	<b>445,969</b>	<b>643,885</b>	<b>1,230,419</b>	<b>1,305,124</b>
<b>Other Funds—</b>					
Insurance Fund ...				11,015	13,729
Main Roads and Harbour Bridge Rates ...				104,951	105,027
Electricity Works Fund ...				2,467,079	2,324,912
<b>Total, Expenditure</b>				<b>3,813,464</b>	<b>3,748,792</b>
INCOME.	£	£	£	£	£
<b>City Fund—</b>					
Rates ...			878,500	878,500	880,885
Rents and hire ...	70,949	96,590	11,357	178,896	235,043
Licenses, fees, dues, fines and proceeds ...	59,212		52,133	111,345	109,656
Sundries ...	178		51,864	52,042	29,300
<b>Total, City Fund</b>	<b>130,339</b>	<b>96,590</b>	<b>993,854</b>	<b>1,220,783</b>	<b>1,254,884</b>
<b>Other Funds—</b>					
Insurance Fund ...				31,436	31,240
Main Roads and Harbour Bridge Rates ...				104,951	105,027
Electricity Works Fund ...				2,539,189	2,523,282
<b>Total, Income</b>				<b>3,896,359</b>	<b>3,914,433</b>

In the City Fund cost of servicing debt, including both interest and provision for redemption, amounted to £616,425, and absorbed 50 per cent. of the income. Of this amount, £388,215, or 63 per cent., was incurred in respect of resumptions, and £77,206, or nearly 13 per cent., in respect of public markets. There was a deficiency of £9,636 on the operations of the City Fund after the deficiencies on subsidiary accounts, viz., Resumptions £349,379 and Public Markets £10,226, had been charged to rate and other general revenues. Surpluses were realised in the Insurance Fund, £20,421, and Electricity Fund, £72,110, and the net surplus on all funds thus aggregated £82,895. At 31st December, 1935, the accumulated deficiency of the City Fund amounted to £466,818, while in the Insurance Fund there was an accumulated surplus of £269,333 and in the Electricity Fund a surplus of £72,110, together with a general reserve of £264,516.

*City of Sydney—Liabilities and Assets.*

The following is a summary of liabilities and assets of all funds of the City of Sydney as at 31st December, 1935:—

Liabilities.		Assets.	
	£		£
Debentures ...	...25,081,064	Land and Buildings, Machinery, Plant, and Stores ...	28,036,514
Sundry Creditors ...	... 1,569,503	<i>Less</i> Depreciation Reserve ...	5,323,963
Overdrafts ...	... 768,172		
Total Liabilities to Creditors ...	...27,418,739		22,712,551
		Sundry Debtors ...	615,274
		Cash and Bank Balances ...	922,191
Reserves, Revenue Ac- counts, etc. ...	... 6,206,005	Investments—Sinking Funds ...	4,361,971
		Other ...	2,118,809
		Total Tangible Assets	£30,730,793
		Loan Discounts and Flotation Ex- penses ...	495,374
		Revenue Accounts—Deficits	466,818
		Expenditure on Streets, etc—Capital- ised ...	1,832,116
		Other ...	99,640
		Total Intangible Assets	£2,893,948
Total Liabilities	£33,624,744	Total Assets ...	£33,624,744

The liabilities at 31st December, 1935, excluding reserves and balances of revenue accounts, amounted to £27,418,739, and the tangible assets, apart from depreciation reserve in respect thereof, amounted to £30,730,796. The excess of assets over liabilities on this basis was £3,312,057.

The total amount of debentures outstanding at the end of 1935 was £25,081,064, against which there were sinking fund reserve accounts amounting to £4,483,486 and proceeds from the sales of residue resumption lands, £1,075,560, leaving a net indebtedness on capital account of £19,522,018. The amount of £5,559,046 held against the debenture debt was invested in Commonwealth Government securities £763,040, City Council debentures and stock £4,195,335 and State Treasury deposits £304,912, while £257,114 was uninvested and £38,645 represented accrued interest.

The debentures included £14,044,264 borrowed in connection with electric lighting, £7,435,875 for resumptions, and £1,266,833 for public markets. The proceeds of such loans have been spent mainly on reproductive municipal works, and in 1935 the various funds were debited with £1,239,199 to meet net interest charges and exchange, including interest on overdrafts and sundry items but less interest earnings on various investments, and £278,763 for sinking fund contributions.

Land, buildings, plant, etc., include such large items as public markets, £1,735,753; town hall, etc., £1,413,175; resumptions, £5,922,219; electricity works, £18,965,367. The value of land, buildings, etc., shown for resumptions includes costs incurred in respect of resumptions used for roads, as details are not shown as to the costs of portions used for roads and those retained as assets in the form of land and buildings.

*Finances of City of Sydney.*

The following table summarises the finances of the City of Sydney since 1931:—

Particulars.	1931.	1932.	1933.	1934.	1935.
Area ... .. Acres	3,220	3,220	3,220	3,220	3,220
Population ... .. No.	89,404	88,600	88,400	88,470	87,570
Value*—	£	£	£	£	£
Unimproved Capital ...	56,960,774	48,910,429	48,929,602	45,979,009	45,891,051
Improved Capital ...	192,194,440	154,595,200	143,791,020	137,272,220	139,586,700
Assessed Annual ...	8,253,241	6,464,096	6,470,596	6,146,262	6,293,552
City Fund†—					
Income—Rates‡ ...	904,769	906,628	911,381	880,885	878,500
Other sources	528,311	397,270	351,202	373,999	342,283
Total ...	1,433,080	1,303,898	1,262,583	1,254,884	1,220,783
Expenditure ... ..	1,522,370	1,381,715	1,324,214	1,305,124	1,230,419
Electricity Works Fund—					
Income ... ..	2,319,578	2,418,143	2,514,686	2,523,282	2,539,189
Expenditure ... ..	2,523,897	2,374,796	2,306,980	2,324,912	2,467,079
All Funds—					
Total Income† ... ..	3,968,093	3,904,066	3,921,806	3,914,433	3,896,359
Total Expenditure† ...	4,237,481	3,915,808	3,752,043	3,748,792	3,813,464
Excess of Income ...	(—)269,388	(—)11,742	169,763	165,641	82,895
All Funds—					
Liabilities ... ..	28,326,823	28,011,257	27,889,999	27,984,235	27,418,739
Assets ... ..	29,731,548	29,793,279	30,213,180	30,805,071	30,730,796
Excess of Assets ..	1,404,725	1,782,022	2,323,181	2,820,836	3,312,057
Loans outstanding ...	24,793,179	25,087,559	25,025,072	25,251,621	25,081,064
Sinking Fund ** ...	3,150,932	3,439,429	3,794,465	4,183,686	4,483,486

(—) Denotes excess of Expenditure. \* Excluding properties not ratable. † See context below.

‡ Including subsidiary accounts, Public Markets, and Resumptions.

§ Includes £25,368 adjustment of exchange on accrued overseas interest, properly applicable to 1930.

\*\* Excluding proceeds from sales of residue resumptions, £1,075,500 in 1935.

The value of Federal Government and other non-ratable properties is not included in the figures shown above. The unimproved capital values of non-ratable properties in 1935 were Federal £1,549,577 and other £8,509,012. Including these amounts the unimproved capital value of all property within the city was thus £55,949,640 in 1935.

The total income and expenditure of all funds as shown in the foregoing table include rates collected on behalf of authorities controlling the Harbour Bridge and the main roads, but corresponding particulars are not included within the operations of the City Fund. Details as to the amount of Harbour Bridge and main roads rates levied annually are shown on page 177.

The total liabilities, as shown above, are exclusive of reserves and balances on revenue accounts. The total assets refer to tangible assets only, less depreciation reserve in respect of them, and intangible assets have been omitted. Sinking fund reserves £4,483,486, and proceeds from the sale of residue lands £1,075,560, represented in the aggregate a proportion of 22.1 per cent. of the debenture loan debt outstanding at the end of 1935.

#### FINANCES OF SUBURBAN AND COUNTRY MUNICIPALITIES AND OF SHIRES.

The Local Government Act prescribes that there must be a general fund in each area, to which must be credited all moneys receivable in respect of the general rate, loans raised for any general purpose and loan rates levied in respect thereof, and moneys receivable in respect of any matter not appertaining to another fund. The resources of the general fund may be applied to any general purposes, such as administration, health, roads and services, etc., and the payment of interest and principal of loans.

There must be a special fund or a local fund for each special or each local rate levied, to which the principles stated for the general fund apply, with the qualification that resources may be applied only to the special purposes or in the specified area in respect of which each rate is levied.

A separate trading fund must be kept for each trading undertaking conducted by the council.

All loan proceeds must be used for the specific purpose for which the loans were obtained, and may not be transferred from one fund to another, except by authority of the Minister.

In addition to the above-mentioned funds, there must be a trust fund, which consists of receipts from the Government pending transfer to appropriate funds, deposits from contractors, etc., and any other amounts held in trust by the council.

According to the ordinances under the Act, accounts must be "Income and Expenditure Accounts," kept by double entry, and each "fund" must have a separate banking account. Thus there is compiled for the general fund and for each special, local, or trading fund a revenue account, showing details of the total expenditure chargeable for the period, whether paid or unpaid, and the total income for the same period, whether received or outstanding. A balance-sheet also is required for each fund with appropriate liabilities and assets, and aggregate balance-sheets and revenue accounts must be published. Only "realisable" assets such as plant, buildings, etc., to be used in rendering services of the council may be shown, so that roads, bridges, drains, and other constructive works are excluded.

The tables which follow have been compiled from the annual statements of accounts of municipal and shire councils operating under the Local Government Act, 1919, in a form suited to the special requirements arising from the nature of activities undertaken.

In performing works and providing services and utilities it is the object of each council to arrange sufficient finance to meet commitments incurred during the year. For this purpose there are available in each year accumulated balances from earlier periods, represented by credit balances of Available Funds Account, and revenue accruals. When any large expenditures are incurred for the purpose of constructing roads, bridges, etc., or acquiring assets, there are available also special means of finance such as the

raising of loans and deferment of payment of principal sums under deferred payment contracts, obligations in respect of which must be liquidated during the period of usefulness of the works constructed or assets acquired.

In the table of "revenue and expenditure" there are shown items of annual revenue, comprising rates levied, Government grants and endowment, charges for services, and miscellaneous forms of licenses, fees, fines, etc., and expenditure chargeable thereto. Expenditure chargeable to revenue includes, in addition to normal recurring items, costs incurred in respect of construction works, such as roads and bridges and other objects having long life not being "realisable assets" or for use in performing works or in rendering services, even though financed by long-term borrowing. Payments made in redemption of indebtedness are excluded from expenditure chargeable to revenue, notwithstanding that funds for the purpose are provided from revenue collections.

The table relating to capital transactions or Invested Funds Account, i.e., that section of the balance sheet which embraces assets of a permanent or fixed nature and long-term liabilities, is designed to indicate the nature of financial transactions other than those appearing under the heads of revenue and expenditure. On the credit side are shown capital expenditure and payments on redemption of indebtedness, the former item being made partly from revenue collections and accumulations and partly from borrowed funds. Debit entries exhibit the extent to which borrowing has been resorted to in financing the year's expenditures, both revenue and capital, and the amount by which asset values have been reduced by reason of provision for depreciation and obsolescence and because of sales. Treatment of depreciation and obsolescence in this manner has the effect of offsetting the inclusion of a similar amount in expenditure chargeable to revenues which does not result in an actual money outgo, being charged for the purpose of assessing true costs of works and services.

The net result on current finances of the year's financial operations, both on account of revenue and capital transactions is shown under the head of "Net Transactions on Available Funds Account" by combining the excess of revenue over expenditure chargeable thereto, or *vice-versa*, and the credit or debit balance on Invested Funds transactions. A revenue surplus has the effect of increasing current finances; i.e., the balance of Available Funds Account, whilst a credit balance on Invested Funds transactions indicates, after allowing for depreciation written off asset values, the utilisation of current finances in the purchase of assets, redemption of indebtedness, etc.

The activities of the City of Sydney, which are dealt with on page 177 *et seq.*, have been excluded from the statements presented in this section because differences in the form in which accounts are compiled preclude even approximations of comparable data.

#### INCOME AND EXPENDITURE.

A summary of the expenditure and revenue of all municipalities and shires in accordance with the foregoing description is shown below for the years 1934 and 1935. The operations of general, special and local funds have been combined under the head of "Ordinary Services," the nature of which is indicated by the sub-heads of functional classifications. Trading,

water and sewerage funds, grouped separately, are further analysed on later pages.

Particulars.	Year ended 31st December, 1935.				Total, Municipalities and Shires, 1934.
	Metropolitan Municipalities (excluding Sydney).	Country Municipalities.	Shires.	Total.	
EXPENDITURE.					
Ordinary Services—	£	£	£	£	£
Administration ... ..	168,236	132,810	224,353	525,399	539,149
Works ... ..	1,765,077	1,312,533	3,412,491	6,490,101	5,378,881
Health—					
Sanitary and Garbage ... ..	213,903	164,362	102,660	480,925	491,860
Parks and Reserves ... ..	333,430	201,957	47,328	582,715	481,310
Other ... ..	33,112	28,898	19,780	81,790	74,564
Total ... ..	580,445	395,217	169,768	1,145,430	1,047,734
Services—					
Street Lighting ... ..	135,336	90,594	50,343	276,273	287,353
Fire Prevention ... ..	51,259	19,971	6,166	77,396	75,762
Baths and Beaches ... ..	20,549	25,625	12,656	58,830	173,565
Markets ... ..	...	9,194	1,385	10,579	
Hospitals, Ambulances and Charities	4,797	6,446	1,826	13,069	
Cemeteries ... ..	6,387	3,011	1,753	11,151	
Noxious Animals and Weeds ... ..	2,119	10,467	31,177	43,763	
Other ... ..	19,020	46,153	17,188	82,361	536,680
Total ... ..	239,467	211,461	122,494	573,422	
Property ... ..	44,082	35,015	17,564	96,661	89,534
Interest on Loans Overdrafts, etc. ...	242,009	65,933	72,362	380,304	394,735
Contributions to Main Roads Board and Harbour Bridge Fund ... ..	193,617	7,282	24,554	225,453	227,953
Other ... ..	18,957	14,939	33,860	67,756	77,132
Total, Ordinary Services, ... ..	3,251,890	2,175,190	4,077,446	9,504,526	8,291,798
Trading Accounts ... ..	78,986	1,048,702	227,750	1,355,438	1,270,759
Water and Sewerage Accounts ... ..	...	341,165	26,706	367,871	364,018
Aggregate Expenditure ... ..	3,330,876	3,565,057	4,331,902	11,227,835	9,926,575
INCOME.					
Ordinary Services—					
Rates and Extra Charges ... ..	2,013,371	763,931	1,282,465	4,059,767	4,060,010
Government Grants—					
Endowment ... ..	...	...	149,250	149,250	150,249
Main Roads Department ... ..	184,613	79,885	958,169	1,222,667	
Emergency Relief Works ... ..	910,266	1,025,951	1,239,867	3,176,084	
Other ... ..	8,376	41,521	229,948	279,845	
Total ... ..	1,103,255	1,147,357	2,577,234	4,827,846	5,804,252
Works—					
Contributions ... ..	93,406	34,901	27,855	156,162	111,456
Other ... ..	30,229	6,441	38,858	75,528	63,853
Total ... ..	123,635	41,342	66,713	231,690	175,309
Health—					
Sanitary and Garbage ... ..	128,402	193,853	120,829	443,084	456,588
Parks and Reserves ... ..	38,196	15,061	3,318	56,575	
Other ... ..	2,870	10,449	11,094	24,413	
Total ... ..	169,468	219,363	135,241	524,072	522,839
Services—					
Baths and Beaches ... ..	21,204	12,951	1,117	35,272	86,430
Markets ... ..	317	18,880	2,305	21,502	
Cemeteries ... ..	9,878	628	77	10,583	
Other ... ..	4,818	11,545	9,458	25,821	
Total ... ..	36,217	44,004	12,957	93,178	86,430
Property ... ..	29,012	60,059	36,978	126,049	116,476
Sundries ... ..	37,272	26,366	19,011	82,649	77,334
Total, Ordinary Services ... ..	3,512,230	2,302,422	4,130,599	9,945,251	8,842,650
Trading Accounts ... ..	95,167	1,205,319	273,244	1,573,730	1,485,388
Water and Sewerage Accounts ... ..	...	522,478	38,212	561,690	537,548
Aggregate Income ... ..	3,607,397	4,030,219	4,443,055	12,080,671	10,865,586
Excess of Income over Expenditure chargeable thereto—					
Ordinary Services ... ..	260,340	127,232	53,153	440,725	550,852
*Aggregate ... ..	276,521	465,162	111,153	852,836	939,011

\*Balance transferred to following table of Capital Transactions.

Administration represents the total administrative expenses of councils, less transfers to trading and water and sewerage accounts of such amounts

as are deemed to arise from the conduct of their operations. Interest on loans, overdrafts, etc., in respect of ordinary services amounted to £380,304, and, on account of functions which are not dissected in the table, to £77,736 for trading undertakings, and to £157,302 for water and sewerage works. Thus total interest accrued in 1935 amounted to £615,342; the total in metropolitan municipalities being £246,126, in country municipalities £265,679 and in shires £103,537.

The aggregate expenditure in 1935 was £1,301,260 greater than in 1934, and expenditure on ordinary services was greater by £1,212,728. The increase was due mainly to larger disbursements through the agency of councils of sums granted by the Government for the relief of unemployment. Funds made available to councils in this manner were devoted chiefly to the construction and improvement of roads and streets and of parks and reserves, expenditure on which increased during the year by £1,111,220 and £97,696 respectively.

Rates levied in 1935 amounted to £4,339,735 and interest charged on overdue rates to £122,586. Of these levies and charges £4,059,767 was on account of ordinary services, while £53,446 was credited to the revenue of trading undertakings and £349,108 to water and sewerage funds.

Amounts granted by the Government to councils are paid into a trust fund and transferred to revenue only as required to meet expenditure actually incurred in the performance of works and services for which the grants have been made. The total Government assistance to municipalities and shires in 1935 amounted to £4,934,572, as compared with £3,890,778 in 1934, £2,204,427 in 1933 and £1,321,340 in 1932. The amount of assistance paid in 1935 to metropolitan municipalities was £1,103,255, to country municipalities £1,252,255 and to shires £2,579,062. The amount shown for country municipalities includes £87,343, representing a part of the cost of constructing water and sewerage works, which was borne by the Government; it excludes, however, remission of existing debt totalling £94,893. A large proportion of the increased Government assistance to councils was associated with emergency relief work schemes.

The following statement of capital transactions, or operations on Invested Funds Account, during 1934 and 1935, should be considered in conjunction with figures of revenue and expenditure:—

Particulars.	Year ended 31st December, 1935.				Total. Municipalities and Shires 1934.
	Municipalities.		Shires.	Total.	
	Metro- politan (excluding Sydney).	Country.			
<i>Debit—</i>	£	£	£	£	£
Loan Expenditure ... ..	123,320	2,034	18,186	163,540	133,771
Balances owing on Deferred Debts incurred during year ... ..	130,139	271,343	127,234	528,716	725,842
Fixed assets written off—					
Depreciation and Obsolescence ... ..	59,165	185,429	108,623	353,217	340,415
Sale ... ..	9,400	35,408	22,552	67,360	69,523
Other ... ..	6,021	18,866	6,340	31,227	20,907
Total ... ..	328,045	533,080	282,935	1,144,060	1,200,518
<i>Credit—</i>					
Assets Purchased ... ..	150,240	585,020	207,904	943,824	1,034,266
Loan Repayments (including Sinking Fund) ... ..	403,358	194,530	113,937	711,825	727,016
Payment of Deferred Debts ... ..	48,935	112,035	72,239	233,209	193,675
Other ... ..	8,307	45,915	8,586	62,808	66,245
Total ... ..	610,840	938,100	402,726	1,951,666	2,021,202
Credit Balance representing net transactions on Invested Funds Account ... ..	282,795	405,020	119,791	807,606	730,684
Net transactions on Available Funds Account—					
*Excess of Income over Expenditure chargeable thereto ... ..	276,521	465,162	111,153	852,836	939,011
Less Credit Balance from Invested Funds Account ... ..	282,795	405,020	119,791	807,606	730,684
Surplus ... ..	(-) 6,274	60,142	(-) 8,638	45,230	208,327

\*Transferred from preceding table of Revenue and Expenditure.

Loan expenditure incurred during 1935 amounted to £163,540, as compared with £133,771 in 1934, £158,057 in 1933 and £254,307 in 1932. Of the amount expended in 1935, a total of £141,406 was incurred by funds coming within the ambit of "Ordinary Services," £20,787 by "Electricity and Gas-works Trading Funds" and £1,347 by "Water and Sewerage Funds." Balances owing on deferred payment debts incurred during 1935 amounted to £528,716, including £473,300 in respect of repayable advances, etc., due to the Government. Deferred payment debts incurred in relation to "Ordinary Services" amounted to £356,802, "Trading Undertakings" £2,242 and "Water and Sewerage Funds" £169,672.

An analysis of credit items appearing in the foregoing table, according to types of fund affected, viz., Ordinary Services, Trading, and Water and Sewerage respectively, was as follows:—Assets purchased £410,181, £252,371 and £280,972; loan repayments £562,329, £147,995, and £1,501; payment of deferred debts £154,870, £15,689, and £62,650.

The net surplus of the revenue of councils over amounts payable from revenue amounted in 1935 to £45,230, after deduction from a surplus of £60,142 in country municipalities, small deficiencies of £6,274 in metropolitan municipalities and £8,638 in shires. Surpluses achieved by 24 metropolitan municipalities amounted to £67,197, by 74 country municipalities to £115,187, and by 68 shires to £77,557. Twenty-four municipalities in the metropolitan area and 54 in the country incurred deficits, the amounts involved being £73,471 and £55,045, and 71 shires incurred deficits amounting to £86,195.

The revenue of municipalities and shires was derived from various sources in the following proportions, viz.: Rates and extra charges, including £402,554 credited to trading, water and sewerage accounts, 36.9 per cent.; Government assistance under all heads, 40.9 per cent.; contributions, etc., to works, 1.9 per cent.; health, 4.3 per cent.; services, 0.8 per cent.; property, 1.0 per cent.; trading and water and sewerage accounts, other than rates and a small amount of Government grants included above, 13.5 per cent.; and other 0.7 per cent.

The revenue per head of population was £3 2s. 5d. in metropolitan municipalities, £7 0s. 6d. in country municipalities, and £5 10s. 3d. in shires.

The total expenditure chargeable against revenue, £11,227,335, was financed by loans, and Government advances and deferred payment debts incurred in respect of works and other purposes to the extent of £115,005 and £233,723 respectively, and the balance of finance so derived, viz., £48,535 and £294,993 was applied to capital purposes in the acquisition of fixed assets. Thus expenditure incurred during the year not financed by borrowing on fixed terms amounted to £12,487,245, consisting of revenue expenditure £10,879,107, repayment of loans £711,825, payments off Government advances and deferred debts £233,209, reservations for repairs and renewals of plant, etc., £62,808 and purchases of assets, etc., £600,296.

The following table shows approximately the manner in which income was disbursed during 1935. Component items of expenditure under ordinary services have been related to income within that sphere, and

total expenditure on ordinary services and trading and water and sewerage accounts to income from all sources:—

Head of Service.	Disbursements per £ of Income.			
	Municipalities.		Shires.	Total.
	Metropolitan (excluding Sydney).	Country.		
Ordinary Services.				
	s. d.	s. d.	s. d.	s. d.
Expenditure chargeable to Income not financed by Loans or other forms of fixed borrowing—				
Ordinary Services—				
Administration ... ..	0 11	1 2	1 1	1 0
Public Works ... ..	8 9	10 8	15 10	12 2
Health ... ..	3 3	3 4	0 10	2 3
Public Services ... ..	1 4	1 9	0 7	1 1
Property ... ..	0 3	0 3	0 1	0 2
Interest on Loans, Overdrafts, etc. ...	1 4	0 7	0 4	0 9
Other ... ..	1 2	0 2	0 3	0 7
Total ... ..	17 0	17 11	19 0	18 0
All Services.				
Ordinary Services ... ..	16 6	9 11	17 6	14 8
Trading Accounts ... ..	0 5	4 11	1 0	2 2
Water and Sewerage Accounts ... ..	...	1 7	0 1	0 7
Total, Revenue Expenditure	16 11	16 5	18 7	17 5
Capital Expenditure, not financed by Loans, etc.—				
Purchase of Assets ... ..	0 7	1 8	0 7	0 11
Loan Repayments ... ..	2 3	0 11	0 6	1 2
Payments off Deferred Debts ... ..	0 3	0 6	0 4	0 4
Other ... ..	...	0 3	...	0 1
Total Expenditure ... ..	20 0	19 9	20 0	19 11

The cost of servicing the debt under the head of ordinary services, including both interest and redemption, was heaviest in metropolitan municipalities, being 3s. 11d. per £ of revenue from ordinary services as compared with 1s. 9d. in country municipalities and 1s. 0d. in shires. The differences in this instance are due mainly to the fact that costly road and street construction has been more extensively carried out in the metropolitan than in country districts. On the other hand, however, substantial debts have been incurred by country councils in the establishment of trading undertakings and water and sewerage services, and for this reason the proportion of their expenditure devoted to debt charges is higher when considered in relation to all activities than when confined to ordinary services only. Thus expenditure per £ of revenue from all sources on interest and debt redemption was 3s. 10d. in metropolitan municipalities, 2s. 10d. in country municipalities, 1s. 4d. in shires and 2s. 7d. for all councils.

#### LIABILITIES AND ASSETS.

The liabilities and assets of the City of Sydney as at 31st December, 1935, are shown on page 179, and the following statement indicates the nature of the liabilities and assets at book value as at that date of the suburban and country municipalities and the shires, amounts due from one fund to

another being excluded. Assets do not include capital value of road and bridge construction, expenditure on which is charged to revenue, even though such works are financed by borrowing in many instances.

Particulars.	As at 31st December, 1935.				Total, Municipalities and Shires, 1934.
	Municipalities.		Shires.	Total.	
	Metropolitan (excluding Sydney).	Country.			
<b>Liabilities—</b>	£	£	£	£	£
Sundry creditors, including Loans outstanding and interest	5,001,542	2,313,394	1,339,122	8,654,058	9,194,513
Debts due to Government, including interest ... ..	454,690	4,741,263	761,931	5,957,884	5,734,406
Bank Overdraft ... ..	609,926	368,009	418,011	1,395,946	1,416,847
Other (including Deposits on Contracts and unexpended Government grants) ...	80,435	222,568	240,110	543,113	415,705
Total ... ..	6,146,593	7,645,234	2,759,174	16,551,001	16,761,471
<b>Assets—</b>					
Cash in hand and bank balances ... ..	324,415	895,301	468,823	1,688,539	1,439,090
Outstanding rates and interest ... ..	996,476	707,281	841,730	2,545,487	2,618,586
Sundry debtors ... ..	292,065	518,857	255,462	1,066,384	1,050,233
Stores and materials ...	48,003	145,673	74,873	268,549	244,027
Land, buildings, plant and machinery ...	2,310,520	9,468,287	2,229,144	14,007,951	13,537,872
Other ... ..	3,052	80,458	88,823	172,333	155,012
Total ... ..	3,974,531	11,815,857	3,958,855	19,749,243	19,044,820
<b>Balance—</b>					
Available Funds ... ..	547,950	1,090,416	714,116	2,352,482	2,287,589
Invested Funds ... ..	(-) 2,720,012	3,080,207	485,565	845,760	(-) 4,240
Net ... ..	(-) 2,172,062	4,170,623	1,199,681	3,198,242	2,283,349

(-) Indicates excess of liabilities.

Balance-sheets of local governing bodies, other than the City of Sydney, are divided into two sections, viz., Available Funds and Invested Funds. In the former section are included liquid assets and current liabilities, whilst the latter covers fixed assets, investments, debts on extended terms and long-term liabilities.

Items comprising the Available and Invested Funds sections of the balance-sheet are combined in the foregoing statement, the balance only of each section being shown.

The substantial credit balances of Available Funds Account, representing excesses of liquid assets over current liabilities carried forward and available for expenditure in 1936, indicate a satisfactory financial position, which, however, is dependent upon collection of outstanding rates. The amount of overdue rates increased very rapidly after 1928, from £651,902 to £2,618,586 at the end of 1934, and then decreased slightly during 1935 to £2,545,487.

The items "overdrafts" and "cash in hand and bank balances" are the totals of debit and credit bank balances respectively of the separate funds of individual councils, and not the net balance of all accounts. Thus an overdraft of, say, street lighting fund has been so treated and not used to

diminish or extinguish a credit bank balance of general fund. At 31st December, 1935, municipalities with net overdrafts on all funds numbered 31 in the metropolitan area and 43 in the country, the total amount in each case being £400,991 and £59,079. The net amount of overdrafts in 68 shires was £127,700. Net credit bank balances on all accounts in the same areas were £115,480, £586,371, and £178,512, the number of individual councils concerned being 17, 81 and 71 respectively.

Assets, mainly in metropolitan municipalities, amounting to approximately £440,000, consisting of undertakings or agreements by the Main Roads Board to repay loans, or to subsidise councils in the repayment of loans and deferred debts incurred for the purpose of carrying out works on main roads, have been excluded from the above statement, though corresponding liabilities have been included. Annual payments by the Main Roads Board of interest and instalments of principal amounting to about £89,500 are included in government grants in the revenue tables.

The policy of constructing roads and other major works from loan moneys has been followed more extensively in the metropolitan area—where development has been rapid—than in the country districts, and this accounts for the heavy adverse balance on Invested Funds Account. In the country districts large outlays of borrowed funds have been more generally applied to the establishment of electricity, gas, water and sewerage services, and are reflected as assets in the value of land, buildings, plant, etc.

#### FINANCIAL ASSISTANCE RECEIVED FROM GOVERNMENT.

The central Government of the State affords financial assistance to the local governing bodies in supplementation of general revenues and by way of contribution to the cost of specified works and services. Assistance to general revenues is paid to shires only, and is in the form of endowment in which individual shires participate according to an apportionment made by the Government in every third year. The matters to be taken into account in making the apportionment are specified in the Act, *e.g.*, the necessity for developing new districts, the extent to which the council and the people of the areas concerned undertake to share in the development by constructing works or paying local rates, the rate levied and its relation to the maximum rate.

The amount of endowment, which for a number of years had been about £150,000 per annum, was increased in 1928 to £250,000. It was reduced in 1931 to the statutory minimum of £150,000, which amount formed the basis of the following allotment made for the triennium commenced 1st January, 1934:—

33	shires	receive	no	endowment.
19	„	„	less than	£500 per annum.
26	„	„	£500 and under	£1,000 per annum.
20	„	„	£1,000	„ £1,500 „
15	„	„	£1,500	„ £2,000 „
11	„	„	£2,000	„ £3,000 „
9	„	„	£3,000	„ £4,000 „
4	„	„	£4,000	„ £5,000 „
1	„	receives	£5,250.	

The shires which receive the largest endowment are Bellingen, £4,250; Kearsley, £4,250; Manning, £4,750; Tenterfield, £4,000; and Dorrigo, £5,250.

Grants by the State for specific purposes, made both to municipalities and to shires, usually form the subject of application by individual councils. Prior to 1925 the State voted annually to municipalities and shires considerable sums for the maintenance of main roads and bridges, and these

sums are included below under the heading "Public Works." In 1925, however, the Main Roads Board came into being and increased funds, set aside for main roads construction and maintenance, were in part disbursed through the councils of municipalities and shires. Annual grants of relatively small amounts are made to recoup revenue lost through the abolition of tolls on road ferries and special assistance is rendered on occasions for repairing damage caused by flood, fire, etc.

The machinery of local government has been applied also to the distribution of money made available by the Government for the relief of unemployment. Under a scheme of relief works commenced in May, 1933, the Government makes fortnightly advances to councils of sums sufficient to meet the wages of persons employed on these works, plus an allowance of 10 per cent. to cover overhead costs. This scheme is an alternative to the distribution of food relief, and through it there was distributed £1,806,603 in 1933-34, £2,814,202 in 1934-35 and £3,343,939 in 1935-36.

Measures embodied in the Local Government (Further Amendment) Act, 1935, authorise the Government to render financial assistance to councils with the object of enabling the councils to undertake the construction of works and provision of services which would otherwise be beyond their financial capacity. To this end, the Treasurer is empowered, until 30th June, 1938, to enter into agreements with councils to contribute towards interest and sinking fund charges accruing in respect of loans raised by the councils. In respect of loans expended by councils on the construction of works of water supply and sewerage, the Treasurer may agree also to pay interest on the loans which is in excess of  $3\frac{1}{2}$  per cent. per annum. Under this arrangement councils are enabled to provide, from their own borrowings, water and sewerage services at an interest cost which coincides with the current rate charged on works in country towns constructed in past years from State loan funds. It is further provided that the Government may make advances to supplement loans raised by councils for certain purposes.

Moneys handled on account of grants by the councils of municipalities and shires for any of the abovementioned purposes are included in the following comparison of funds provided by the State and Commonwealth Governments and expended by councils:—

Year.	Municipalities.			Shires.				Total Government Assistance.
	Public Works.	Other.	Total Municipalities.	Endowment.	Public Works.	Other.	Total Shires.	
	£	£	£	£	£	£	£	£
1924	43,382	6,213	49,595	146,705	265,218	306	412,229	461,824
1925	232,354	5,959	238,313	149,345	613,045	7,253	769,643	1,007,956
1926	242,051	5,441	247,492	147,525	958,447	7,123	1,113,095	1,360,587
1927	298,184	9,196	307,380	153,410	1,051,454	1,296	1,206,160	1,513,540
1928	372,133	6,152	378,285	261,315	1,007,937	1,444	1,270,696	1,648,981
1929	424,732	6,102	430,834	254,948	1,488,334	498	1,743,780	2,174,614
1930	603,857	23,865	632,722	250,303	1,467,358	4,930	1,722,591	2,375,313
1931	342,707	9,073	351,780	149,533	678,980	315	828,828	1,180,608
1932	426,678	53,109	479,787	147,095	693,139	1,319	841,553	1,321,340
1933	796,407	90,433	836,840	148,544	1,147,991	21,052	1,317,587	2,204,427
1934	1,635,987	274,694	1,910,681	150,249	1,815,009	14,839	1,980,097	3,890,778
1935	2,355,510	*	2,355,510	149,250	2,429,812	*	2,579,062	4,934,572

\* Included under Public Works.

Amounts stated above for grants represent transfers to revenue from the Trust Fund, to which payments by the Government are credited, pending the actual performance of works, etc., in respect of which grants have been made.

## LOANS.

Loans obtained by the Council of the City of Sydney prior to 1905 were raised under the provisions of special Acts of Parliament. In 1905 the Sydney Corporation Amendment Act authorised the Council to raise loans, with the approval of the Governor, by the sale of debentures secured upon the corporate rates and revenues of the Council from whatever source arising, and to issue new debentures to repay any such debentures upon maturity. The term of the debentures may not exceed in the aggregate fifty years, and a sinking fund must be established for each loan raised under the Act of 1905, on the basis of 3 per cent. per annum compound interest over the period of fifty years. The maximum rate of interest payable was fixed at 4 per cent. until 1917, when amending legislation provided that the rate of interest be fixed by the Council with the approval of the Governor. The Act of 1917 provided also that the Council, in lieu of issuing debentures subject to the provisions of the Act of 1905, may issue debentures to secure the repayment of its loans, together with interest thereon, by equal yearly or half-yearly instalments. An Act passed in 1928 authorised the City Council to raise loans outside Australia.

In terms of a further amendment, which became operative as from 1st July, 1935, the Council may not exceed by way of overdraft an amount equal to one-half of the income, as certified by the Auditor-General, of the fund in respect of which the overdraft exists. Proposals to raise loans, other than renewal loans, overdrafts and loans for essential services, must be submitted for investigation by the Minister, who may make such recommendations as he thinks fit. Particulars of the proposal must be notified and a poll must be taken if demanded before the expiration of one month by 15 per cent. of the electors enrolled as ratepayers. The Council is empowered to issue inscribed stock and to maintain inscribed stock registries in any countries in which principal sums are payable. On the application of security holders, debentures may be converted to inscribed stock and inscribed stock to debentures.

Loans obtained by the councils of other municipalities and of shires are raised usually under the Local Government Act, 1919, as amended by subsequent Acts.

In respect of municipal loans, the Local Government Act prescribes that a council may not borrow any moneys which, with existing loans, will cause the total indebtedness to exceed 20 per cent. of the unimproved value of ratable land in the area. It is provided, however, that certain loans expended on reproductive works may be excluded in calculating the limit.

Loans under the Local Government Act may be raised by four methods, viz., limited overdraft, and renewal, ordinary, or special loans. The Governor's approval of a loan is required in all instances with the exception of limited overdrafts.

Limited overdrafts may be obtained for any purpose upon which the council is authorised to expend a fund (except a trust fund) or for any purpose for which moneys raised by ordinary loan may be applied. The sum raised may not exceed half the preceding year's income of the fund in respect of which it is obtained.

The purpose of limited overdrafts is to enable the councils to finance a regular programme of works and services and to meet extraordinary expenditure during periods of inequality or fluctuations in the collection of rates. In view of this fact, the Department of Local Government suggests to the councils as a general principle that the amount of the overdraft at the end of each year, or, at least, at the end of each council's term, should not exceed the amount outstanding for rates in the case of the general or other fund of which rates constitute the principal source of revenue.

Renewal loans are for the purpose of repaying or renewing any other loan, and for paying the expenses incidental thereto.

Ordinary loans are those for such purposes as carrying out orders as to boundary works, discharging liability arising under verdicts or orders of legal tribunals, establishing or extending sanitary and garbage services, acquiring machinery and equipment for the construction of roads and bridges, establishing road punts and road ferries, and meeting liabilities transferred to the council consequent upon alteration of boundaries. An ordinary loan may be obtained notwithstanding that it will raise the total indebtedness of the council above the prescribed limit, but while there is an excess the council may not raise a special loan.

Special loans are those which do not fall within the other three categories. A council must give notice of a proposal to raise a special loan, and the ratepayers have the right, by petition of at least 25 per cent. of those concerned, to demand that a poll be taken as to whether they approve of the loan, and as to whether the loan rate (if any) shall be on the unimproved or the improved capital value. As a general rule shire special loans may not exceed in the aggregate a sum equal to three times the amount of the income, as shown by the last year's accounts.

The law governing the borrowing powers of municipalities and shires was revised by an amending Act passed in 1935. In terms of the Act, the definition of an ordinary loan was extended to include loans raised for the purpose of (a) constructing drains, stormwater channels, public baths and works for the development of tourist traffic, the improvement of recreational facilities, bridges and roads of access and the establishment and extension of electricity undertakings; (b) providing water supply and sewerage services; (c) financing the construction by the Metropolitan and Hunter District Boards of water mains and sewers in areas served by them; and (d) purchasing tools and materials required by the councils for the execution of unemployment relief works. Ordinary loans for any of these purposes can only be raised with the approval of the Governor, which cannot be granted after 30th June, 1938, nor unless the Minister has indicated that the purpose is one in respect of which the Government will make a supplementary advance towards the capital cost or a contribution annually towards commitments incurred by the council in relation to the loan. Where the purpose of a loan is the provision of water and sewerage services, it is required also that the proposed scheme first be investigated and reported upon by a "Loans and Advances Advisory Committee," or that an agreement be entered into with the Metropolitan or Hunter District Boards when the extension of water mains and sewers is undertaken by either of those Boards.

The councils may accept from ratepayers advances not exceeding £500 for the purpose of carrying out necessary works for which the lenders have applied. Such loans must be free of interest or at a rate not exceeding 4 per cent., and the amount accepted by a council may not exceed one-tenth of the total revenue for the preceding year.

Renewal, ordinary, or special loans under the Local Government Act are secured, firstly upon the income of the fund to which the loans belong, and, secondly, upon the income of the council arising from any source.

Unless the loans are repayable by instalments at intervals of one year or less, there must be a sinking fund for loan repayment in every fund in respect of which a renewal, ordinary, or special loan has been raised, and in each year the council must transfer to the sinking fund a sum of not less than the amounts which were intimated in its applications for approval of the loans. In the case of loans repayable by annual or more frequent instalments, the reserve for repayment is optional.

In 1934 councils were empowered to enter into agreements for the variation of the terms under which loans were raised, by postponement of the date for the payment of principal sums or interest thereon. The power was exercisable at any time prior to 1st January, 1936, and the period during which payments were to be deferred was subject to the approval of the Governor. The charging of interest on deferred principal and interest at rates not in excess of those chargeable on original loans was permitted.

The fixed loans of the City of Sydney and municipalities and shires, as at 31st December, 1935, were as stated hereunder, particulars of New South Wales loans owing by country municipalities including £121,848 raised in Victoria:—

Local Bodies.	Loans Outstanding.				Accumulated Sinking Funds.	Interest Accrued during 1935.
	New South Wales.	London.	New York.	Total.		
Municipalities—	£	£	£	£	£	£
Sydney ... ..	15,960,898	7,173,000	1,947,166	25,081,064	4,483,486	1,144,696
Other Metropolitan	4,720,016	...	...	4,720,016	5,166	219,720
Country ... ..	*2,100,765	...	...	2,100,765	74,682	98,358
Total Municipalities	£22,781,679	7,173,000	1,947,166	31,901,845	4,563,334	1,462,774
Shires ... ..	845,604	305,000	...	1,150,604	69,833	53,083
Total ... ..	£23,627,283	7,478,000	1,947,166	33,052,449	4,633,167	1,515,857

\* Including £121,848 raised in Victoria.

The interest shown for the City of Sydney represents the amount payable for a full year on the loans outstanding at the end of the year. The total amount of interest distributed according to place of payment was New South Wales £1,029,824, Victoria £5,968, London £372,971, and New York £107,094.

During the year 1935 new loans were arranged as follows:—£203,939 in metropolitan municipalities other than the City of Sydney, in which no new loans were floated, £34,138 by country municipalities, and £20,231 by shires.

Net indebtedness on account of fixed loans, *i.e.*, after deduction of sinking fund provision, amounted at the end of 1935 to £28,419,282. In addition, there were outstanding various amounts of indebtedness on account of water and sewerage works and deferred payment debts in respect of plant, etc. Particulars of the total amount of liabilities of councils are shown on pages 179 and 187, including capital indebtedness due to the Government on account of water and sewerage works, amounting to £4,616,695.

The average rate of interest payable on loans of municipalities was 5.0 per cent. in 1931, and 4.6 per cent. in 1935, corresponding rates for shires being 5.8 per cent. and 4.6 per cent. respectively. In 1935 the average rate payable by the City of Sydney was 4.6 per cent., by other metropolitan municipalities 4.6 per cent., and by country municipalities 4.7 per cent. These rates are based on amounts of principal outstanding at the end of the year and, therefore, slightly overstate the true average rate. Lower rates of interest resulted largely from the operation of the Interest Reduction Act, 1931.

The loan indebtedness of municipalities and shires increased rapidly from 1921 to 1931, as a result of large expenditures by councils, chiefly on road construction and in the establishment of electricity undertakings.

The following comparison shows the fixed loans outstanding at the end of various years since 1916, also the ratio of loans to the unimproved capital value of ratable property in the incorporated areas:—

At 31st Dec.	Amount of Fixed Loans Outstanding (excluding bank overdrafts).				Proportion to Unimproved Capital Value of Ratable Property.			
	City of Sydney.	Other Muni- cipalities.	Shires.	Total.	City of Sydney.	Other Muni- cipalities	Shires.	Total.
	£	£	£	£	per cent.	per cent.	per cent.	per cent.
1916	7,050,100	*1,692,133	*148,367	8,890,600	22·62	2·91	0·14	4·56
1921	9,341,742	1,982,953	109,573	11,434,268	26·03	2·43	0·08	4·60
1926	14,288,088	4,388,336	1,036,391	19,712,815	31·92	3·82	0·67	6·27
1929	21,982,947	8,145,285	1,337,352	31,525,584	36·05	5·42	0·84	8·34
1930	24,546,946	8,590,689	1,488,501	34,626,136	40·31	5·39	0·88	8·90
1931	24,793,179	8,612,970	1,437,512	34,843,661	43·53	5·42	0·88	9·20
1932	25,087,559	8,200,854	1,361,250	34,649,663	51·29	6·06	0·91	10·40
1933	25,025,072	7,736,266	1,299,956	34,061,294	51·14	6·12	0·90	10·68
1934	25,251,621	7,238,843	1,216,072	33,706,536	54·92	5·92	0·86	10·87
1935	25,081,064	6,820,781	1,150,604	33,052,449	54·65	5·63	0·83	10·80

\* Including bank overdrafts.

The effects of lower valuations are noticeable in years subsequent to 1930, when there were only slight variations in amounts of loans outstanding. The ratio of loans to the improved capital value in 1935 was 17.97 per cent. in the City of Sydney, and 1.83 per cent. in the other municipalities.

It is apparent that the borrowing by the municipalities and shires is, in the aggregate, well within the limits allowed by the Local Government Act already referred to. The relatively extensive loans of the City of Sydney are invested largely in revenue-producing assets, and considerable amounts have been expended on resumptions for city improvements, which are partly reproductive. Of the city loans current at 31st December, 1935, an amount of £14,044,264 was invested in the city electricity works from which electricity is supplied not only to the City proper but to a number of other local areas.

The place of redemption and the approximate amount of interest payable on the foregoing loans of the City of Sydney, the other municipalities and the shires in New South Wales are shown in the following table:—

Year.	Principal raised—			Interest accrued during each year.		
	In Australia.	Oversea. *	Total.	In Australia. †	Oversea. *	Total. †
	£	£	£	£	£	£
1916	... 8,066,745†	823,855	8,890,600	316,371	33,208	349,579
1921	... 9,922,268	1,512,000	11,434,268	423,746	85,690	509,436
1926	... 16,480,315	3,232,500	19,712,815	835,089	187,862	1,022,951
1929	... 24,220,584	7,305,000	31,525,584	1,297,849	405,840	1,703,689
1930	... 25,277,150	9,348,986	34,626,136	1,391,541	514,194	1,905,735
1931	... 25,513,028	9,330,633	34,843,661	1,225,350	516,958	1,742,308
1932	... 25,346,266	9,303,397	34,649,663	1,158,668	490,830	1,649,498
1933	... 24,776,266	9,285,028	34,061,294	1,140,868	476,889	1,617,757
1934	... 24,265,548	9,440,988	33,706,536	1,064,318	480,935	1,545,253
1935	... 23,627,283	9,425,166	33,052,449	1,035,792	480,065	1,515,857

\* Years 1916 to 1929 London only; New York included, in 1930 to 1935, viz: Loan repayable by half yearly instalments, amounted at end of 1935 to £1,947,186 annual interest being £107,094.

† Includes interest on bank overdrafts in years 1916 to 1926 inclusive.

‡ Includes bank overdrafts, except in City of Sydney.

The amounts stated above do not include the sums due to the Government as capital debt on water and sewerage and drainage works, viz., £4,616,695 owing by municipalities and shires at the end of 1935, and £72,041 in respect of the Grafton and South Grafton works. The statement is exclusive also of loans of county councils, viz., £721,312 in 1935, and the interest, £32,941, which was payable in Sydney.

The amount of loan expenditure by local governing bodies in New South Wales, together with repayments of principal sums or payments to sinking funds for the purpose of repayment, are shown below for the years 1931 to 1935:—

Particulars.	1931.	1932.	1933.	1934.	1935.
<b>Loan Expenditure—</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>
<b>Municipalities—</b>					
City of Sydney ... ..	679,127	170,695	459,038	210,372	558,072
Metropolitan ... ..	516,068	182,334	90,206	86,198	123,320
Country ... ..	100,068	48,874	45,528	29,070	22,034
Shires ... ..	62,130	23,099	22,323	18,503	18,186
County Councils ... ..	45,168	74,661	170,152	95,212	20,222
<b>Total Loan Expenditure £</b>	<b>1,402,561</b>	<b>499,663</b>	<b>787,247</b>	<b>439,355</b>	<b>741,834</b>
<b>*Repayment of Loans—</b>					
<b>Municipalities—</b>					
City of Sydney ... ..	404,796	412,852	406,150	439,658	476,679
Metropolitan ... ..	398,387	390,798	381,227	396,459	403,358
Country ... ..	183,727	191,199	202,451	212,474	194,530
Shires ... ..	96,985	102,807	114,508	118,083	113,937
County Councils ... ..	22,617	24,919	29,690	33,136	36,265
<b>Total, Repayments of Loans £</b>	<b>1,106,512</b>	<b>1,122,575</b>	<b>1,134,026</b>	<b>1,199,810</b>	<b>1,224,769</b>

\* Including credits to Sinking Fund Reserves.

Resort is frequently made by councils to the "instalment payment system" in the purchase of assets, especially in connection with the construction of country water and sewerage works by the Government, the acquisition of road-making and other plant and, in some cases, the performance of works, such as roads, bridges, etc. The total amount of debt of this nature incurred by municipal and shire councils, excluding City of Sydney, was £588,256 in 1931, £319,212 in 1932, £453,652 in 1933, £725,842 in 1934, and £528,716 in 1935, whilst payments of instalments of outstanding balances were £235,320, £214,814, £192,221, £193,675 and £233,209, respectively.

#### MUNICIPAL GASWORKS.

The Local Government Act authorises the councils of municipalities and shires to construct gasworks, and to supply gas for public lighting and for use by private consumers. In the metropolitan area the supply of coal gas is controlled by private companies and in the country private and municipal undertakings provide the service at different centres. Gas works have not been established by any of the shire councils.

Details of the accounts of the gaswork undertakings of various municipalities are shown in the section "Local Government" of the Statistical

Register, 1935-36. A summary of the gasworks revenue accounts of the municipalities with coal gasworks in various years since 1921 is shown in the following statement:—

Year ended 31st December.	Expenditure.		Income.					Surplus or Deficiency (—).
	Cost of Gas and Residuals.	Total Expendi- ture.	Sales.		Loan Rates.	Other.	Total.	
			Gas	Residuals.				
	£	£	£	£	£	£	£	£
1921	139,466	145,261	135,629	12,534	4,698	4,646	157,507	12,246
1926	127,554	128,681	111,852	12,966	5,126	4,377	134,321	5,640
1931	103,814	106,317	90,332	13,419	4,631	3,376	111,758	5,441
1932	100,012	100,606	82,576	13,359	4,137	4,865	104,937	4,331
1933	97,630	98,282	76,807	11,329	3,135	4,504	95,775	(—)2,507
1934	95,477	95,851	74,697	13,538	2,016	5,348	95,599	(—) 252
1935	89,630	97,234	71,537	12,084	2,292	5,570	91,483	(—)5,751

The activities of municipal gasworks declined as facilities were extended for the use of electricity in country districts. The number of municipalities conducting coal-gas undertakings decreased from 21 in 1921 to 18 in 1935, and the volume of gas sold from 375,915,000 cubic feet to 206,959,000 cubic feet.

The volume of gas manufactured in 1935 measured 269,589,000 cubic feet and the average cost, after deducting proceeds from the sale of residuals, was 5s. 9d. per 1,000 feet. Of the gas sold, 206,345,000 cubic feet were for private consumption and 614,000 cubic feet for public lighting. The average price realised per 1,000 cubic feet of gas sold was 6s. 11d. Provision for depreciation of plant, treated as a manufacturing cost, amounted to £12,950 and £13,837 was provided for the redemption of capital indebtedness. Plant to the value of £7,672 was purchased during the year.

The balance-sheet of the gasworks trading undertakings at the end of 1935 is given below:—

Liabilities.				Assets.			
			£				£
Loans and deferred payment debts	...	...	33,044	Buildings, land, stock, plant, etc.	...	...	266,421
Sundry creditors, etc.	...	...	16,629	Sundry debtors, including amounts	...	...	
Overdrafts	...	...	14,938	due from other funds	...	...	25,192
				Fixed deposits and investments	...	...	10,480
				Bank balance, and cash	...	...	7,999
Total Liabilities	...	...	64,611				
Excess of Assets	...	...	245,481				
Total	...	...	£310,092	Total	...	...	£310,092

A surplus of assets at the end of 1935 was disclosed by all gasworks undertakings, though ten of them incurred deficiencies in respect of the year's operations. In one undertaking which was finally closed during the year, a deficit of £6,254 resulted from the disposal of assets. This item accounts for the unusually large expenditure not chargeable as a cost of manufacture.

#### CONTROL OF ELECTRICITY DEVELOPMENT.

Measures for co-ordinating the development within the State of electricity resources are contained in the Gas and Electricity Act, 1935.

The Act prohibits the construction or extension of a generating station or a main transmission line for the supply of electricity to the public unless the Governor's approval first be obtained, except that such approval is unnecessary in the case of a transmission line forming part of a system within an area already lawfully supplied with electricity. It also constituted a special committee, called the "Electricity Advisory Committee," to act in an advisory capacity to the Government.

The duties of the Electricity Advisory Committee are to report on matters referred to it relating to the generation, transmission, supply and use of electricity, and, in relation to electricity and its supply, to furnish information concerning finance, statistics, standards and testing, to devise and supply details of schemes of co-ordination, to consider and recommend amendments to the law and to carry out such functions of an advisory character as may be prescribed. Proposals relating to electricity, which by law require the Governor's approval before they may be executed, must be referred to the Committee prior to the granting of approval.

The Committee consists of thirteen members. Four members were appointed under the Act, viz., the Under-Secretary for Local Government, who was appointed chairman, the general manager of the Sydney County Council, and the chief electrical engineer of the Public Works Department and of the Department of Railways. The remaining nine members, who are to hold office for three years, were appointed by the Governor, eight of them from nominations by various representative bodies.

#### MUNICIPAL AND SHIRE ELECTRICITY WORKS.

The supply of electricity for lighting and for power is undertaken directly in many areas by the councils of municipalities and shires and by county councils formed by groups of municipalities and shires for the sole purpose of conducting electricity undertakings. In some cases the councils have established works for the generation of electricity, while in others it is purchased in bulk from another council, from Government works, or from collieries, etc., and distributed to consumers. In addition, electricity for street and private lighting and power in defined areas is supplied under contract with the councils from works which are privately owned and operated, and are not included in the statistics relating to the municipal and shire undertakings which follow.

The largest undertaking is that of the City of Sydney, where operations were commenced in 1904 to supply electricity within the city, the works being extended subsequently to supply a large area beyond the city boundaries. In 1935 the undertaking distributed electricity direct to consumers in the city and in thirty-two other municipalities, excluding one municipality in which only a small area was served by the undertaking. It also supplied electricity in bulk to the local councils of ten municipalities and four shires, which attend to the distribution in their respective localities, and to a private company for distribution within a municipality and a shire.

The electricity undertaking of the City Council was transferred on 1st January, 1936, to the Sydney County Council, constituted by the Gas and Electricity Act, 1935. The Sydney County District embraces the local governing areas supplied directly with electricity by the undertaking.

Certain other local government bodies obtain electricity in bulk from the generating stations of the Railway Commissioners of New South Wales, the Victorian State Electricity Commission, or the New South Wales Government power station at Port Kembla. A number of southern localities and the Federal Capital are supplied from the Burrinjuck hydro-electric works.

The St. George County Council purchases from the Railway Commissioners bulk supplies of electricity which are sold for street lighting and to private consumers in its area, and the Clarence River County Council has constructed hydro-electric works on the Nymboida River.

A statement of the expenditure and income of the electricity concerns of the local governing authorities in 1935 is shown below:—

Particulars.	City of Sydney.	Other Municipalities.	Shires.	County Councils.		Total.
				St. George.	Clarence River.	
<i>Income.</i>	£	£	£	£	£	£
Sales of Electricity ...	2,532,111	1,091,799	221,359	131,608	74,985	4,051,862
Rent of Meters, Installations, etc. ...	7,078	81,553	23,404	1,361	5,354	118,750
Trading Income ...	2,539,189	1,173,352	244,763	132,969	80,339	4,170,612
Loan Rates ...	...	25,894	25,260	...	...	51,154
Interest and Sundries	...	9,757	3,221	6,675	...	19,653
Total Income ...	2,539,189	1,209,003	273,244	139,644	80,339	4,241,419
<i>Expenditure.</i>						
Cost of Electricity ...	2,391,816	968,159	216,475	111,638	58,498	3,746,586
Public Lighting, Attendance, etc. ...	75,263	62,295	11,275	3,651	870	153,354
Trading Expenditure	2,467,079	1,030,454	227,750	115,289	59,368	3,899,940
Net Income ...	72,110	178,549	45,494	24,355	20,971	341,479
Credits to Sinking Fund and Redemption of Capital Indebtedness ...	*205,801	110,568	39,279	21,343	15,631	392,622

\* Comprising transfer from Depreciation Reserve, £130,847, interests on investments, £68,205. Exchange in respect of London loans, £6,749.

In suburban and country municipalities and shires, 78 municipal and 32 shire councils provided electricity services during 1935, and of these 26 municipalities and 12 shires operated generating plants, 50 municipalities and 20 shires distributed current purchased in bulk, while 2 municipalities generated a small quantity of electricity, though purchasing the major portion of their supplies from other sources. The ratio of electricity generated by councils to the total quantity generated and purchased was approximately 19 per cent. in municipalities and 9 per cent. in shires.

Deficiencies in respect of the year's operations amounting to £7,849 were incurred by 6 municipalities, while in the shires, some of which conduct more than one electricity fund, the aggregate deficiency of 6 funds amounted to £304.

The amount provided in 1935 to meet depreciation and obsolescence of assets aggregated £777,669, the charge in the City of Sydney being £599,470, in other municipalities £127,476, in shires £33,397 and in the county councils £17,326. Capital expenditure incurred during the year amounted to £355,478 (net) in Sydney, £192,264 in other municipalities, £52,735 in shires, and £57,001 in county councils.

A summary of the liabilities and assets of the electricity works at 31st December, 1935, is shown below:—

Particulars.	City of Sydney.	Other Municipalities.	Shires.	County Councils.		Total.
				St. George.	Clarence River.	
<i>Liabilities.</i>	£	£	£	£	£	£
Loans and deferred payment debts ... ..	14,044,264	1,066,940	423,098	228,214	503,452	16,265,968
Overdrafts ... ..	26,492	32,715	6,569	...	26,350	92,126
Sundry creditors, etc. ..	527,775	86,293	24,571	27,530	22,535	688,704
Total Liabilities £	14,598,531	1,185,948	454,238	255,744	552,337	17,046,798
<i>Assets.</i>						
Land, buildings, plant, etc. ... ..	14,156,008	2,521,837	742,623	321,203	603,009	18,344,680
Sundry debtors, etc. ...	507,935	300,210	101,610	18,073	25,046	952,904
Bank balance and cash..	25	167,534	44,477	20,903	5,266	238,205
Fixed deposits and investments ... ..	2,376,217	269,385	35,325	177,774	...	2,858,701
Total Assets £	17,040,215	3,258,966	924,035	537,953	633,321	22,394,490
Excess of Assets £	2,441,684	2,073,018	469,797	282,209	80,984	5,347,692

The liabilities of the City of Sydney undertaking, as shown above, are exclusive of depreciation and other reserves; and the assets represent the tangible assets less depreciation reserve in respect thereof—loan discounts and flotation expenses £262,136, and interest suspense account £99,640 being excluded.

#### *City of Sydney Electricity Undertaking.*

The City of Sydney undertaking obtained supplies of electricity from a power station at Pyrmont until the year 1923, when a contract was made for the purchase of additional supplies from the Railway Commissioners. Since January, 1929, supplies have been available from a power station constructed by the Council at Bunnerong, and the contract with the Railway Commissioners was terminated on 30th September, 1929. The cost to the 31st December, 1935, of the Bunnerong generating station, was approximately £3,812,492, of which £1,553,028 represented cost of land, buildings and railway siding, £2,216,034 cost of machinery and equipment, and the balance furniture, plant and tools.

The following statement shows the electricity sold during various years from 1929 to 1935, sales to the City Council for public lighting, etc., being included. The revenue from sales and the cost of the electricity are shown,

also the deficit or surplus after the payment of interest and exchange, and providing for depreciation of plant:—

Particulars.	1929.	1931.	1933.	1934.	1935.
Units sold (000's) ...	347,595	319,326	362,788	398,632	428,615
Receipts per unit (d.)...	1.69	1.70	1.66	1.52	1.42
	£	£	£	£	£
Cost of electricity* ...	2,313,434	2,466,719	2,260,843	2,262,310	2,391,816
Other expenditure ...	44,902	57,178	52,934	62,602	75,263
Total expenditure	2,358,336	2,523,897	2,313,777	2,324,912	2,467,079
Sales ... ..	2,494,606	2,288,607	2,505,946	2,511,564	2,532,111
Other income ... ..	55,079	30,971	8,740	11,718	7,078
Total income ... ..	2,549,685	2,319,578	2,514,686	2,523,282	2,539,189
Net Profit ... ..	191,349	(—)204,319	200,909	198,370	72,110

\* Including interest, exchange and depreciation.

It is not practicable to dissect the sales by this undertaking so as to show the purposes for which the current was used, because a large proportion is supplied to premises—residential and commercial—where only one meter is provided, and the charges are assessed under a system whereby a reduced rate is charged for the quantity in excess of a limit which varies according to certain conditions, *e.g.*, the size of residential premises, or the maximum demand in the case of factories.

#### *Sales of Electricity.*

A dissection of the sales in 1934 and 1935 by municipalities (other than the City of Sydney), shires and the county councils is shown below.

Particulars.	1934.			1935.		
	Units.	Amount.	Per unit.	Units.	Amount.	Per unit.
	000	£	d.	000	£	d.
Private lighting ... ..	37,977	741,512	4.69	43,068	782,293	4.36
Public lighting ... ..	12,756	126,858	2.39	13,550	128,704	2.28
Power and bulk sales ... ..	109,562	559,200	1.22	134,242	631,520	1.13
Total ... ..	160,295	1,427,570	2.14	190,860	1,542,517	1.94

The value of sales, as stated above, does not include minimum charges, rentals for meters, motors, etc., and in some instances discounts for prompt payment, totalling £22,766 in 1935, were not allocable over the different classes of sales, hence the amount is included. The cost of the 160,295,000 units sold in 1934 was £1,252,319, or 1.88d. per unit, and 190,860,000 units sold in 1935 cost £1,356,118, or 1.71d. per unit.

#### FIRE BRIGADES.

The public services for the prevention and extinguishing of fires are controlled by a Board of Fire Commissioners, constituted under the Fire Brigades Act, 1909, as amended in 1919 and 1927. Its jurisdiction extends over certain districts which were defined in the Act or added by proclamation. The areas under the oversight of the Board are grouped to form fire districts. They include the City of Sydney, nearly all the area comprised by the suburban municipalities, also Newcastle and suburbs, Broken Hill, and other municipalities, and thirty-two shires in respect of towns contained in them.

The Board consists of a president, appointed by the Governor for a term of five years, and seven members, elected for a term of three years, viz., one by the councils of the Sydney and suburban municipalities, one by the councils of the other incorporated areas to which the Act applies, three elected by the fire insurance companies, one by the members of volunteer fire brigades, and one by the permanent firemen who are members of the Fire Brigades Association of New South Wales. The votes are apportioned among the councils according to the amount contributed to the fund administered by the Board, viz., £100 or under, one vote; over £100 and not exceeding £500, two votes; over £500 and not exceeding £1,000, three votes; over £1,000, four votes. Each insurance company and each volunteer and permanent fireman is entitled to one vote.

In each year the Board makes an estimate of the amount proposed to be expended in the various fire districts during the ensuing year, and of this sum the councils of the municipalities and shires concerned contribute one-fourth, the insurance companies one-half, and the Government one-fourth. The estimates must be made so that the contribution by the councils in a fire district will not exceed  $\frac{1}{4}$ d. in the £ on the unimproved capital value of ratable land, though the Board may exceed this limit with the consent of the Minister if requested by the councils to do so.

Where a fire district is comprised of more than one municipality or shire, the amount to be paid by each council is apportioned according to the annual value of ratable land within the district. Payments by the insurance companies are based on the amount of premiums payable in respect of fire risks within each district. With the consent of the Governor, the Board may borrow money up to £250,000.

The Board establishes and maintains permanent fire brigades and authorises the constitution of volunteer brigades, which are subsidised out of the funds. In the metropolitan districts in 1936 there were 78 fire brigades comprised by 615 permanent firemen whose services are wholly at the Board's disposal and 252 volunteers. In the country there were brigades at 151 localities, the principal stations being at Newcastle and Broken Hill, and there were 66 permanent firemen and 1,410 volunteers.

The following table shows the revenue account of the Board of Fire Commissioners for the year ended 31st December, 1936:—

Revenue.		Expenditure.	
	£		£
Balance at 1st January, 1936 ...	33,130	Administration ... ..	12,961
Subsidy from Government ...	92,807	Salaries including Payments to	
Subsidy from Municipalities and		Volunteers ... ..	221,589
Shires ... ..	92,807	Repairs to Buildings, Plant, and	
Subsidy from Fire Insurance Com-		other expenses ... ..	118,038
panies and Firms ... ..	185,614	Equipment and Property Charges	38,290
Other Sources ... ..	7,875	Balance ... ..	21,355
Total ... ..	£412,233	Total ... ..	£412,233

The contributions by the fifty-five municipalities and shires comprising the Sydney fire district in 1936 represented 5s. 1 $\frac{1}{4}$ d. per £100 of assessed annual value of the ratable land, as compared with 5s. 7d. in 1919.

Contributions amounting to £185,614 were received from 123 insurance companies and 44 firms who insured goods with companies not registered in New South Wales. In the Sydney fire district such contributions represented 15.27 per cent. of the premiums less reinsurances, and in the other districts the proportions ranged from 3.78 per cent.

The estimates of proposed expenditure by the board for the year 1937 amounted to £385,280, viz., £285,816 for the Sydney fire district and £99,464 for other districts.

The balance-sheet of the Board as at 31st December, 1936, is shown in the following statement:—

Liabilities.				Assets.			
£				£			
Fund Account	...	...	33,074	Land and Buildings	...	409,257	
Trust Accounts	...	...	2,065	Plant and Fire Appliances	...	327,224	
Debentures and Accrued Interest	...	...	141,983	Stocks on Hand	...	28,616	
Revenue and Expenditure Account	...	...	21,355	Bank Balances and Cash	...	2,322	
Property and Equipment Account	...	...	566,495	Debtors	...	157	
Administration Account	...	...	2,604				
Total	...	...	£767,576	Total	...	£767,576	

#### WATER SUPPLY AND SEWERAGE SERVICES.

The Metropolitan Water, Sewerage, and Drainage Board administers extensive water supply and sewerage drainage works in Sydney and environs, and the Hunter District Water Supply and Sewerage Board exercises similar functions in Newcastle and surrounding districts. These works have been constructed mainly from the loan moneys which form part of the public debt of the State, and interest and sinking fund charges in respect of the capital debts are payable from the revenues of the Boards.

The receipts and expenditure of the metropolitan services until 1st April, 1925, and of the Hunter District services until 1st July, 1928, were included in the Consolidated Revenue Account of the State. On the dates mentioned these accounts were separated from the Consolidated Revenue Account; the Metropolitan Board was entrusted with the management of its own moneys and a separate account was opened in the Treasury in respect of the Hunter District services.

In towns outside the areas administered by the Metropolitan and Hunter District Boards, works have been constructed mostly by the Minister for Public Works out of moneys voted for the purpose by Parliament. As a general rule the works were transferred upon completion to the care of the councils under conditions requiring repayment of capital cost by instalments over a period fixed in relation to the durability of the works. Interest is charged on unpaid balances at a rate fixed from time to time.

The arrangements under which the Minister for Public Works undertook to finance and carry out construction were suspended temporarily on the passing of the Local Government (Further Amendment) Act, 1935. Under the Act, the raising of loans by councils to meet the capital cost of works is facilitated, and councils are required to undertake the work of construction. The Government proposes in approved cases to supplement loans raised by councils by making a contribution towards the capital cost. In order that interest charges on loans raised by councils will not be higher than the rate charged on debt owing in respect of works already constructed by the Public Works Department, the Government may agree also to pay interest on the loans in excess of 3½ per cent per annum. An advisory committee is required to report upon proposals for the construction of works and to indicate the proportions in which the estimated capital cost is to be borne by the council and the Government. The share to be borne by the council is estimated on the basis of the surplus available for repayment of loans after meeting working expenses and interest from annual revenues calculated at 25s. and 21s. per head of population for water and sewerage services, respectively. Provisions of the Act facilitating borrowing for the foregoing purpose expire on 30th June, 1938.

At 30th June, 1936, water supply services constructed wholly or in part from loan funds by the Department of Public Works were in operation in ninety-five country towns, sewerage works in twenty-one towns, and storm-water drainage works in twelve towns. The total cost of the waterworks which had been charged to councils, *i.e.*, after allowing for capital remissions, was £3,919,133, and of sewers and stormwater channels £1,566,363. The financial transactions in connection with these services are included in the accounts of the municipalities and shires, except the waterworks at Broken Hill and Hillgrove, which are administered by the central Government, and at Junee, where the water is delivered by the Public Works Department into service reservoirs, and the Grafton and South Grafton system which is controlled by a corporate board representing the two municipalities.

The debts due to the central Government on account of waterworks (including the Grafton and South Grafton services) at 30th June, 1936, amounted to £3,549,164, and on account of sewerage and drainage works to £1,407,070; the aggregate of the annual instalments of principal and interest was £173,102 in respect of the debt due on waterworks, and £61,746 for sewerage works.

Particulars of remission of indebtedness in a number of country water and sewerage schemes, following an investigation of their finances by a special committee, were published in the 1934-35 issue of this Year Book. Interest payable to the Government in respect of capital debts has been fixed at a maximum rate of  $3\frac{1}{2}$  per cent. per annum.

A summary of the revenue and expenditure of the various systems is shown below—the particulars of the Metropolitan and Hunter District services being for the year ended 30th June, 1936, and those of the other works for the calendar year, 1935.

Particulars.	Water Supply and Sewerage Works.				
	Metropolitan.	Hunter District.	Grafton and South Grafton.	Other Country Towns.	Total.
	£	£	£	£	£
	Water Supply.				
Gross Revenue ... ..	1,573,298	226,998	8,473	440,518	2,249,287
Working Expenses ... ..	428,751	73,587	12,661	202,443	707,442
Interest and Exchange ... ..	990,341	113,604	2,729	119,644	1,226,309
Net Revenue ... ..	154,206	39,807	3,092	118,431	315,536
Provision for Debt Redemption	83,997	10,530	1,881	50,605	147,013
Surplus ... ..	70,209	29,277	1,211	67,826	168,523
	Sewerage and Drainage.				
Gross Revenue ... ..	946,037	77,442	...	176,534	1,200,013
Working Expenses ... ..	246,726	34,467	...	42,481	323,674
Interest and Exchange ... ..	649,443	27,223	...	48,196	724,862
Net Revenue ... ..	49,868	15,752	...	85,857	151,477
Provision for Debt Redemption..	57,599	10,364	...	15,876	83,839
Surplus ... ..	(—)7,731	5,388	...	69,981	67,638

The net revenue after providing for working expenses was £2,418,284. Interest in the Metropolitan services amounted to £906,450 for water and £589,281 for sewerage and drainage, exchange being £83,891 and £60,162 respectively. In the Hunter District interest was £99,407 and exchange £14,197 in respect of water supply, and corresponding amounts for sewerage services were interest £23,821 and exchange £3,402. No exchange was chargeable in respect of other works. The surplus, after meeting sinking fund contributions and instalments in reduction of debt, amounted to £236,161. In respect of country undertakings, a charge for depreciation

of assets, included under working expenses, may be regarded as a duplication of provision made for debt redemption. The amount charged for depreciation in 1935 was £327 in the Grafton water works, £19,272 in other country water works and £3,227 in sewerage works.

A brief statement of the liabilities and assets of the Metropolitan and Hunter District services at 30th June, 1936, and of the other works at 31st December, 1935, is shown below:

Particulars.	Water Supply and Sewerage Works.				
	Metropolitan	Hunter District.	Grafton and South Grafton.	Other Country Towns.	Total.
	£	£	£	£	£
<b>Liabilities—</b>					
Capital Indebtedness ...	42,805,451	5,950,490	75,136	5,020,999	53,852,076
Other Creditors ...	604,759	12,654	605	128,918	746,936
<b>Total Liabilities</b> ...	<b>43,410,210</b>	<b>5,963,144</b>	<b>75,741</b>	<b>5,149,917</b>	<b>54,599,012</b>
<b>Assets—</b>					
Works, etc. ...	44,765,500	6,621,314	105,552	6,188,359	57,680,725
Sundry debtors and outstanding rates ...	182,348	88,234	3,032	546,821	820,435
Cash, investments, etc. ...	218,896	157,000	224	256,605	632,725
<b>Total Assets</b> ...	<b>45,166,744</b>	<b>6,866,548</b>	<b>108,808</b>	<b>6,991,785</b>	<b>59,133,885</b>
<b>Excess of Assets</b> ...	<b>1,756,534</b>	<b>903,404</b>	<b>33,067</b>	<b>1,841,868</b>	<b>4,534,873</b>

The surplus of assets in the Metropolitan works comprises a grant by the State Government from unemployment relief funds, spent on construction, £677,863; capital value of old City Council water works transferred to the Board £98,486; reserves for repayment of capital debt £917,706; and accumulated credit balance of revenue account £62,479. In the Hunter District the surplus comprises £673,666, representing the excess value of assets over loan debt due to the Government consequent upon an adjustment in 1928; reserves for repayment of capital debt £122,421, general reserve £25,600 and credit balance of revenue account £81,717.

#### *Drainage Trusts.*

In addition to the water and sewerage and drainage works to which the foregoing tables relate, twenty-six trusts for reclamation of swamp and other lands were in operation as at 30th June, 1936. The capital cost of the works was £79,226, of which £33,987 was outstanding, and the annual instalments for repayment amounted to £4,522. The owners of the lands improved by these works are responsible for the repayment of the capital expenditure, and they are required to provide for the cost of maintenance and administration.

#### *Metropolitan Water Supply and Sewerage.*

The Metropolitan Board of Water Supply and Sewerage was constituted in 1888 to assume control of the water supply and sewerage services in the county of Cumberland, including those under the control of the City Council. The management of the water supply was transferred to the Board in May, 1888, and of the sewerage in September, 1889. The Board's jurisdiction extends to a large district outside the county of Cumberland and embraces a strip of territory extending along the South Coast beyond Wollongong to Lake Illawarra.

The Board, now termed the Metropolitan Water, Sewerage, and Drainage Board, was reconstituted as from 30th April, 1935, and is composed of seven members. Two members, a president and a vice-president, are appointed by the Governor for a period of five years, and five members, elected by the aldermen and councillors of local areas concerned, hold office for four years. For the purposes of the elections, the municipalities and shires have been grouped into five constituencies and one member is elected in respect of each.

Capital funds of the Board to 30th June, 1936, were derived from the following sources:—

Particulars.	Water.	Sewerage.	Drainage.	Total.
	£	£	£	£
New South Wales Government—				
Loan Funds ... ..	15,067,271	9,895,258	312,884	25,275,413
<i>Less</i> Repayments ... ..	386,714	244,382	9,483	640,579
Net ... ..	14,680,557	9,650,876	303,401	24,634,834
Advances ... ..	3,917,309	1,473,028	130,413	5,520,750
Unemployment Relief Fund ...	292,218	290,174	...	582,392
Amount due to New South Wales Government ... ..	18,890,084	11,414,078	433,814	30,737,976
Loans raised by Board ... ..	6,798,073	4,788,466	464,607	12,051,146
Capital Expenditure awaiting flotation of Loan ... ..	485,998	46,800	(—) 1,471	531,327
Unemployment Relief—Commonwealth Savings Bank ... ..	6,613	9,715	...	16,328
*Unemployment Relief Fund (New South Wales)—Grant ... ..	235,315	442,548	...	677,863
Total ... ..	£ 26,416,083	16,701,607	896,950	44,014,640

\* Not repayable.

The capital indebtedness of the Board to the Government as at 1st April, 1925, was declared at £23,576,702, of which £14,311,175 was in respect of water supply, £8,955,206 for sewerage and £310,321 for drainage. With a view to reducing capital charges borne by the Board, thus permitting an extension of services in outlying suburbs, the Metropolitan Water, Sewerage and Drainage (Capital Indebtedness) Act, 1935, provides for the remission of £11,450,000 of debt due by the Board to the Government. The remission is to be made in instalments over a period of five years commencing on 1st July, 1936, and is contingent upon the Board expending £3,000,000 from loan funds in each of the years.

The Board is required to pay to the State Treasury interest on its debt to the State, also from 1st July, 1928, sinking fund contributions at the rate of 5s. per £100, this being the rate payable by the State in respect of its contributions to the National Debt Sinking Fund, established under the financial agreement between the Commonwealth and the States. Interest rates on the Board's indebtedness to the Government have been substantially reduced in recent years. The average rate of interest on the public debt of the State, which rate the Board was called upon to pay for a period, fell from 5.17204 per cent. in 1929-30 to 4.37804 per cent. in 1932-33, and the rate of 5 per cent. on Treasury advances was reduced to 4½ per cent. as from 1st January, 1932. From 1st July, 1933, the rate was 4 per cent. for both classes of debt, and it was further reduced from 1st July, 1934, to 3½ per cent. as compared with the average rate of interest on the public debt of the State of 3.81666 in 1935-36.

The Board, with the approval of the Governor, may raise its own loans, but the debt so incurred in respect of any of its services must not exceed 20 per cent. of the unimproved value of the lands ratable for that service. A sinking fund provision of 10s. per cent. is required in respect of such loans.

Up to 30th June, 1928, no special loans had been floated for the Board, but loan advances amounting to £412,000 in 1924-25, £1,703,000 in 1925-26, £2,000,000 in 1926-27 and £2,380,000 in 1927-28 were made to the Board by the Colonial Treasurer. These advances, amounting to £6,495,000, were to be repaid in annual instalments of £324,750 over a period of twenty years from 1st January, 1930. As, however, instalments were paid only in 1929-30, 1930-31 and 1935-36, the amount outstanding at 30th June, 1936, was £5,520,750.

Particulars of the loans floated by the Board, which were current at 30th June, 1936, are shown below:—

Year.	Amount.	Price of Issue.	Rate of Interest.*	Term— Years.	Repayable in—
	£		Per cent.		
1928 ... ..	1,000,000	Par.	*5 $\frac{3}{4}$	20	Australia.
1929 ... ..	1,485,000	£99 10 0	*5 $\frac{3}{4}$	15	"
1930 ... ..	850,000	£99 10 0	*6 $\frac{1}{2}$	20	"
1930 ... ..	1,466,146	£87 5 0	5 $\frac{1}{2}$	20	New York.
1931 ... ..	50,000	£99 10 0	*6 $\frac{1}{2}$	20	Australia.
1932 ... ..	100,000	Par.	5	15	"
1932 ... ..	1,200,000	£98 0 0	4 $\frac{1}{2}$	15	"
1933 ... ..	500,000	£98 0 0	4 $\frac{1}{2}$	15	"
1933 ... ..	500,000	£97 10 0	4 $\frac{1}{2}$	20	"
1933 ... ..	2,500,000	Par.	4	23	"
1934 ... ..	1,000,000	"	3 $\frac{3}{4}$	12	"
1935 ... ..	500,000	"	3 $\frac{3}{4}$	8	"
1936 ... ..	1,000,000	£98 0 0	4	15	"
1936 ... ..	500,000	£98 0 0	4	15	"

\* Subject to  $\frac{2}{3}$  reduction under the Interest Reduction Act, 1931.

The amount outstanding at 30th June, 1936, in respect of loans floated by the Board was £12,051,146, exclusive of an amount of £600,000 undrawn, though arranged in March, 1936. Sinking fund investments held against such loans amounted to £175,14

During the period April, 1924, to June, 1933, the Board accepted money on deposit at call and on fixed terms, and thus obtained temporary finance which was at times substantial. Deposits have not been accepted by the Board since the latter date.

The sources of the metropolitan water supply are the waters of the Nepean, Cataract, and Cordeaux Rivers, draining an area of 347 square miles with a copious rainfall. The supply is stored chiefly in five large reservoirs, viz., Prospect, from which 5,503,000,000 gallons are available by gravitation; Cataract, with a capacity of 20,743,000,000 gallons; Cordeaux, 20,597,000,000 gallons; Nepean, 17,828,000,000; and Avon, 47,153,000,000 gallons. At Woronora a reservoir of 15,568,000,000 gallons capacity is under construction, while at Manly a reservoir of 438,000,000 gallons was put out of commission in 1935-36.

The water is conveyed from the upper storages to the Prospect Dam, thence to Sydney and adjacent areas by means of tunnels, canals, etc., from which systems branch to supply Camden, Campbelltown, and other townships along the southern railway. Wollongong and several settlements on the South Coast are supplied from two reservoirs on the Upper Cordeaux River which have a combined capacity of 430,000,000 gallons, and water for Richmond is pumped from the Hawkesbury River. There are seventy-three service reservoirs throughout the area reticulated, with a total

capacity of 480,000,000 gallons. The largest has a capacity of 175,750,000 gallons; there is one of 96,000,000 gallons capacity, two of 37,000,000 gallons and three of about 19,000,000 gallons.

The total length of water mains as at 30th June, 1936, was 3,890 miles, as compared with 3,768 miles at 30th June, 1935. These measurements are the result of an actual check of the system and eliminate superseded lines which were included in previous years.

The first sewerage works in Sydney were begun in 1853, and in 1889, the date of transfer to the Metropolitan Board of Water Supply and Sewerage, there were 70½ miles of sewers in existence.

The present system consists of three main outfalls—the Bondi Ocean outfall; the southern and western suburbs outfall, which discharges into the Pacific Ocean at Long Bay; and the northern suburbs outfall, discharging into the ocean at North Point. They serve a population of 884,299 out of an estimated total population served by the system of 968,926 persons.

The Metropolitan Water, Sewerage and Drainage Board maintains 82 miles of channels for stormwater drainage purposes, and is authorised to levy drainage rates within areas notified by gazettal.

The following statement shows the number of houses supplied with water and those connected with the sewerage system administered by the Metropolitan Board in various years since 1911.

Year ended 30th June.	Water Supply.				Sewerage.		
	Houses Supplied.	Total Supply during Year.	Average Daily.		Houses connected.	Length of Sewers.	Length of Stormwater Drains.
			Per House.	Per head of population supplied.			
	No.	Thousand gallons.	gallons.	gallons.	No.	miles.	miles.
1911	139,237	10,587,434	208	41·7	168,012	825	49
1916	183,598	14,374,000	214	42·9	130,638	1,022	54
1921	221,886	17,701,000	218	43·7	148,923	1,197	64
1926	268,558	24,506,739	250	50·0	176,388	1,419	67
1931	308,657	30,803,000	273	54·7	204,177	1,871	76
1932	311,246	32,194,000	282	56·5	206,893	1,883	76
1933	315,097	32,337,000	281	56·2	209,900	1,936	76
1934	319,607	31,546,000	271	63·1	214,024	2,041	77
1935	322,480	33,683,000	287	67·1	220,557	2,106	79
1936	326,021	34,372,000	288	67·8	226,885	2,179	82

General rates for water and sewerage are levied on the assessed annual value of the premises. The rates, which in 1916 were 6d. in the £ for water and 9½d. for sewerage, had risen to 9d. and 12d. respectively in 1921. In recent years the rates have varied as follow, viz.:—

Year.	Water Rate. d.	Sewerage Rate. d.
1931-32	9	8
1932-33	10½	10
1933-34	9½	9
1934-35	9½	8½
1935-36		
1936-37		

The charge for water supplied by meter for gardens, livestock, and trade purposes in 1932-33 was 1s. 4d. per 1,000 gallons, less a rebate of 2d. where consumption was greater than in the previous year. In subsequent years the rate has been 1s. 2d., with a rebate of 2d. on water used in excess of the previous year's consumption. Water is supplied without a meter to areas,

mostly small gardens, not exceeding 1,000 square feet for a special fee of 8s. per annum. The number of gardens registered on 30th June, 1936, was 58,474.

Stormwater drainage rates are fixed in each area, so as to yield the revenue required to meet expenses, interest and sinking fund charges. They vary from  $\frac{1}{4}$ d. to  $\frac{3}{4}$ d. in the £ of assessed annual value. In substitution of its power to levy stormwater drainage rates in any area, the Board may arrange for the payment from the general fund of a council of a sum equivalent to the amount which would be receivable as the proceeds of a rate.

The following statement shows particulars of the financial transactions relating to the services controlled by the Metropolitan Board in various years from 1911:—

Year ended 30th June.	Capital Indebtedness.	Gross Revenue.	Working Expenses and Management.	Net Revenue.	Interest on Capital.	Ex-change.	Sinking Fund Contribution.	Surplus.
£	£	£	£	£	£	£	£	£
<i>Water Supply.</i>								
1911	5,420,813	299,442	99,355	200,087	192,486	...	...	7,601
1921	10,323,252	855,751	347,298	508,453	473,890	...	...	34,563
1926	16,338,231	1,319,872	492,633	827,239	795,144	...	66,350	(—) 34,255
1931	23,381,090	1,672,954	456,474	1,216,480	1,062,981	93,921	58,010	1,563
1932	23,534,241	1,735,808	400,163	1,335,645	1,105,745	151,825	60,456	17,619
1933	23,905,107	1,728,397	413,204	1,315,193	1,013,808	162,313	64,553	74,519
1934	24,476,811	1,516,295	414,101	1,102,194	948,771	93,465	74,841	(—) 14,883
1935	25,369,907	1,499,879	422,981	1,076,898	877,084	85,977	79,473	34,364
1936	26,180,768	1,573,298	428,751	1,144,547	906,450	83,891	83,997	70,209
<i>Sewerage.</i>								
1911*	4,496,290	234,208	79,636	154,572	159,070	...	...	(—) 4,498
1921*	7,329,632	615,615	229,441	386,174	341,675	...	...	44,499
1926	10,138,844	777,809	293,244	484,565	501,451	...	38,917	(—) 55,803
1931	14,440,475	979,389	247,896	731,493	694,575	63,944	39,674	(—) 66,700
1932	14,613,152	1,000,444	211,511	788,933	669,338	105,642	40,906	(—) 26,953
1933	14,976,954	1,031,771	212,184	819,587	617,205	115,180	43,229	43,973
1934	15,150,416	900,875	229,207	671,668	584,723	64,026	49,829	(—) 26,910
1935	15,713,691	875,988	236,722	639,266	539,463	59,234	52,467	(—) 11,898
1936	16,259,059	906,723	237,279	669,444	560,362	57,619	55,014	(—) 3,551
<i>Drainage.</i>								
1926	398,796	33,790	15,568	18,222	20,189	...	1,688	(—) 3,655
1931	699,450	51,745	11,516	40,229	33,880	2,624	1,872	1,853
1932	681,876	60,501	10,526	49,975	32,671	5,026	1,938	10,340
1933	681,932	46,576	10,839	35,737	30,432	6,110	2,051	(—) 2,856
1934	749,042	39,119	10,297	28,822	28,387	2,768	2,209	(—) 4,542
1935	817,152	38,992	9,684	29,308	26,967	2,661	2,368	(—) 2,688
1936	896,950	39,314	9,447	29,867	28,919	2,543	2,585	(—) 4,180

\* Includes particulars of Drainage Branch.

With the exception of 1925-26 amounts shown in the foregoing table as working expenses exclude expenditure on renewals. In the year mentioned, expenditure included in respect of renewals was £70,274 for water supply, £3,818 for sewerage and £1,966 for drainage.

During the period 1906-07 to 31st March, 1925, renewals were met from the Public Works Fund, the amount expended in this manner totalling £484,589. Since the reconstitution of the Board in 1925, there has been expended on renewals £1,018,711, of which £376,585 was charged to revenue up to 30th June, 1929, and £642,126 to a renewals reserve fund. Resources of the renewals reserve fund have been derived from £160,500 charged against revenue in 1929-30; £304,095 appropriated from surplus revenues in subsequent years, and £190,209 granted by the Unemployment Relief Council in the period 1932-33 to 1934-35. At 30th June, 1936, the unexpended balance of the renewals reserve fund amounted to £12,678.

No charge was made for sinking funds until the separation of the Board's financial affairs from the Consolidated Revenue Fund on 1st April, 1925, and the Board was first called upon to bear a share of exchange payable in respect of State oversea debt in 1930-31.

Accounts are kept on a revenue and expenditure basis, and the revenue accrued and the expenditure incurred in respect of any year are brought into account in that year. The accumulated loan expenditure is inclusive of works in course of construction. Interest on these works is payable by the Board and until 1927-28 it had been the custom to charge to revenue interest on works during construction. In that year, however, it was decided to capitalise such interest in respect of major works, *i.e.*, those having a life estimated at not less than fifty years.

### *The Hunter District Water Supply and Sewerage.*

The water supply works of the Lower Hunter were constructed by the Government under the provisions of the Country Towns Water Supply and Sewerage Act of 1880. In 1892, control of the works was transferred to a Board under the authority of a special Act.

The Board is constituted by nine members, *viz.*, a president appointed by the Governor and eight members elected by the aldermen and councillors of the local areas concerned.

Water is obtained mainly from a dam of 5,000 million gallons capacity on the Chichester River at a point about 60 miles north from Newcastle. This supply can be supplemented if required by pumping water from the Hunter River.

The sewerage scheme for the Hunter district has its outfall at Merewether Gulf, some distance south from Newcastle. The districts served are Newcastle, Adamstown, Hamilton, Lambton, New Lambton, Merewether, Waratah, Wickham, and parts of the Tarro, Lake Macquarie and Cessnock shires.

Particulars relating to the water supply and sewerage services of the Board at intervals since 1911 are given below:—

Year ended 30th June.	Water Supply.				Sewerage.	
	Properties supplied.	Supply during year.	Average Daily Supply.		Properties Connected.	Length of Sewer.
			Per Property.	Per Head.		
	No.	thousand gallons.	gallons.	gallons.	No.	miles.
1911 ...	17,164	675,214	193	21·5	1,465	30
1921 ...	25,874	1,711,187	181	36·2	12,218	148
1926 ...	33,997	2,668,215	215	43·0	18,971	177
1931 ...	42,631	2,905,391	187	37·3	21,471	200
1932 ...	42,778	2,863,463	183	36·5	21,526	202
1933 ...	42,968	2,961,547	189	37·7	21,801	203
1934 ...	43,110	3,043,379	193	38·6	21,920	246
1935 ...	43,811	3,277,373	205	40·8	22,548	248
1936 ...	44,656	3,670,130	224	44·9	24,066	249

A water rate of 10d. in the £ on assessed annual values of ratable premises was charged up to 30th June, 1927, then it was increased to 12d. on premises with an annual value exceeding £11. A charge of 15s. per annum is payable on premises valued at £14 or less, and extra charges are made for water used for other than domestic purposes. The charge by meter is 1s. 6d. to 2s. per 1,000 gallons. On ratable vacant lands a rate of 10d. in the £ is

levied where the assessed annual value is above £6; in other cases the minimum charge is 5s. per annum. The sewerage rate is 12d. in the £ on assessed annual value of ratable premises and 10d. in the £ on ratable vacant lands, and minimum charges of 15s. and 5s. respectively are leviable where assessed values do not exceed £15 and £6.

Up to 30th June, 1928, the receipts were paid into Consolidated Revenue Fund of the State and payments in connection with the services were made from that fund. No charge was made on account of expenditure on renewals, which was met from the Public Works Fund of the State. Interest was charged against revenue only on so much of the loan capital as was revenue-producing, the balance being either capitalised or paid from Consolidated Revenue Fund. On 1st July, 1928, a special deposits account was opened in the State Treasury for the receipts and expenditure, and the capital indebtedness to the State at 30th June, 1928, was determined by agreement between the Government and the Board and declared in the Hunter District Water and Sewerage Act, 1928, to be £3,360,911, viz., water supply £2,514,483, sewerage £661,888, and storm-water drainage £184,540. The Board is required to collect sufficient rates, etc., to cover expenses and to pay interest on its capital indebtedness and sinking fund contributions at the rate of 5s. per £100.

In determining the capital indebtedness a large amount was written off in consideration of the additional cost of the Chichester waterworks owing to delay in construction as a result of the war, concessions in charges for water supplied to industrial concerns and the State railways, and considerable sums paid to the Treasury since 1907 as net surpluses and instalments to sinking fund for renewals.

Particulars relating to revenue, expenses, etc., during various years since 1911 are shown below:—

Year ended 30th June.	Capital Debt.	Gross Revenue.	Working Expenses and Management.	Interest on Loan Capital. †	Sinking Fund.	Net Revenue.
	£	£	£	£	£	£
<i>Water Supply.</i>						
1911 ...	495,747	45,711	17,774	16,970	...	10,967
1921 ...	1,472,074	116,320	59,895	35,556	...	20,869
1926 ...	3,733,126	163,807	65,328	55,819	...	42,660
1928 ...	2,514,483*	214,669	89,769	76,957	...	47,943
1931 ...	2,847,998	235,325	77,706	160,298(a)	8,117	(—) 10,796
1932 ...	2,862,557	220,017	70,213	163,048(b)	8,105	(—) 21,349
1933 ...	2,870,223	208,251	67,478	146,821(c)	8,843	(—) 14,891
1934 ...	2,889,654	213,020	68,211	131,138(d)	9,841	3,830
1935 ...	2,898,585	215,696	66,395	114,306(e)	10,193	24,802
1936 ...	2,912,875	226,998	73,587	113,604(f)	10,530	29,277
<i>Sewerage and Drainage.</i>						
1911 ...	170,151	8,975	3,177	2,902	...	2,896
1921 ...	590,790	32,164	16,007	25,328	...	(—) 9,171
1926 ...	719,549	68,412	22,625	31,932	...	13,855
1928 ...	846,428*	79,636	24,206	33,777	...	21,653
1931 ...	1,868,802	91,158	37,630	44,642(a)	5,083	3,803
1932 ...	2,233,177	86,607	35,547	33,304(b)	5,867	11,889
1933 ...	2,523,399	73,238	31,672	35,420(c)	4,855	1,291
1934 ...	2,708,842	72,233	33,004	31,749(d)	5,765	1,715
1935 ...	2,889,765	74,578	32,636	27,634(e)	9,556	4,752
1936 ...	3,037,615	77,442	34,467	27,223(f)	10,364	5,388

\* Capital debt written down.

† Includes exchange—Water (a) £15,578, (b) £25,916, (c) £22,719, (d) £17,208, (e) £14,477; (f) £14,197, and Sewerage (a) £9,756, (b) £246, (c) £5,481, (d) £4,166, (e) £3,500, (f) £3,402.

The increase in the interest charges after 1927-28 was due to the fact that interest in respect of the Chichester waterworks, previously capitalised, was charged to revenue.

#### ROADS, BRIDGES AND FERRIES.

A review of the State transport system, as it affects roads, bridges, and ferries, including Main Roads administration, is published in Part "Trade, Transport and Communication" of this Year Book. An account is also given therein of the construction and control of the Sydney Harbour Bridge, and the collection of revenue and its disbursement in meeting costs of administration and maintenance, interest obligations and contributions to sinking fund.

## SOCIAL CONDITION.

THE social condition of the people of New South Wales is favoured by a salubrious climate with abundant sunshine and adequate rainfall for the development of varied natural resources from which a plentiful supply of food and other necessities of life are derived. Wages, hours of labour, and other industrial conditions are regulated with the object of preserving the health of the workers and of enabling even the lowest paid employee to maintain a family according to a reasonable standard of living. Family allowances are paid for the benefit of dependent children in families with small incomes, and pensions for the aged and infirm, and special provision is made for the welfare of the workless.

The system of government is based on a broad franchise which embraces every adult citizen. The legal system is based on principles which give equal status to all citizens. The land laws are designed to promote a healthy growth of rural settlement. The railways, being owned by the State, are used for national purposes, and the federal tariff laws aim at the extension of local industries without encroachment upon existing standards of industrial employment. Legal restrictions have been placed upon gambling, and upon the manufacture and sale of intoxicating liquors and deleterious drugs, in order to minimise the social evils attendant upon poverty and drunkenness. Education is free at both primary and secondary public schools.

The mildness of the climate enables the people to engage in outdoor recreation at all times of the year. Measures for the prevention of sickness and the encouragement of hygienic conditions of life find their reflex in low death rates and in the decreasing incidence of preventable diseases.

### PUBLIC HEALTH AND RELIEF SERVICES.

The principal State services in relation to public health in New South Wales are organised as the Department of Public Health under the control of a Minister of the Crown. The department includes two branches, one directed by the Board of Health and the other by the Director-General of Public Health. Their functions, though distinct, are closely co-ordinated, and the Director-General, who is a medical practitioner and a permanent salaried officer of the Government, is *ex officio* President of the Board of Health. The Board consists of ten members, including five legally qualified medical practitioners, all being nominated by the Government. It is the executive and administrative authority in connection with the health laws. It acts in an advisory capacity towards the Minister for Public Health and the Government, and exercises general supervision in regard to public health matters. The Director-General of Public Health controls the State medical services and the State institutions for the treatment of the sick and infirm, and microbiological laboratories in Sydney and Broken Hill.

The executive personnel of the Department of Public Health includes medical officers and sanitary inspectors. The former are appointed by the Government, and are permanent salaried officers, who devote the whole of their time to matters relating to public health.

Medical officers exercise constant supervision in the metropolitan area, in the Hunter River district, which includes Newcastle, and in Broken Hill; and they visit other localities when required. In every town a local medical practitioner is appointed as a Government medical officer for the purpose of attending to Government medical work, *e.g.*, inquests, sickness in gaols, etc.

In the Department of Public Health the principal activities are organised in special divisions, *e.g.*, industrial hygiene, maternal and baby welfare, tuberculosis, laboratories, sanitation, and pure food, each in charge of a specially-qualified officer. The medical officers of the Department act also as medical referees in regard to claims for workers compensation.

The Hospitals Commission, under the presidency of the Minister for Public Health, supervises public hospitals, and there is a school medical service in the Department of Education.

The most important legislative enactments relating to public health are the Public Health Act, dealing with public health and sanitation; Acts relating to dairies supervision, noxious trades, diseased animals and meat, pure food, and to hospitals; and provisions of the Local Government Act which specify the powers and duties of the municipal and shire councils for safeguarding health in the incorporated areas. The authorities are empowered to take steps to prevent the spread of infectious diseases, to regulate the erection of dwellings, and to order the demolition or improvement of insanitary buildings, to prohibit the manufacture or distribution of unwholesome or adulterated foods and drugs, (with special powers in relation to milk and meat) to regulate the conduct of noxious trades, to deal with nuisances, etc. Control of sanitation by means of by-laws and regulations is the method adopted generally, as being readily adaptable to the varying conditions of a widely-scattered community.

Executive duties in relation to public health devolve primarily upon the local authorities, who carry out the functions under supervision of the Board of Health as the central controlling authority. Within municipalities the duties are undertaken by the local councils, and outside municipal areas they are performed either by the shire councils or by persons or bodies specially appointed for the purpose.

In addition to the organisation under the control of the State Government there is a Federal Department of Public Health, which discharges important functions in regard to quarantine, industrial hygiene, etc., and conducts research relating to causes of diseases and of deaths, and to methods of prevention and cure.

A Federal Health Council was constituted in November, 1926, to advise the Commonwealth and State Governments on health questions generally and to devise measures for co-operation and for promoting uniformity in legislation and administration. The membership includes the principal health officers of each State, with the Federal Director-General of Health as chairman.

The services of the State Government, concerned with family allowances, widows' pensions, sustenance for unemployed persons and their dependants, and other forms of charitable relief, are under the control of the Minister for Social Services, with a permanent officer of the Public Service as Director of Government Relief. A central bureau has been established with the object of co-ordinating charitable relief by State or private organisations in order to prevent fraud and duplication.

The Child Welfare Department is administered by the Minister for Education.

Old age pensions, invalid pensions and maternity allowances are provided by the Commonwealth Government.

#### GOVERNMENT EXPENDITURE ON PUBLIC HEALTH AND CHARITABLE RELIEF.

The expenditure from public revenues on eleemosynary objects in New South Wales, including expenditure by the Commonwealth, amounted to £12,304,100, or £4 12s. 8d. per head of population in 1935-36. In addition,

large sums were expended from loans on works for the relief of unemployment and on buildings such as hospitals. A comparative statement of the principal items of expenditure from revenue during the last five years is shown below. The amounts shown as State expenditure represent disbursements from the Consolidated Revenue Fund, except in 1931-32, when payments from the Unemployment Relief and Family Endowment Funds are included. These funds were merged into the Consolidated Revenue Fund as from 1st July, 1932:—

Expenditure from Revenue on—	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
<b>Public Health—</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>
Government hospitals; subsidies to hospitals, etc. ...	727,638	906,349	916,730	825,113	894,841
Mental hospitals and like institutions	594,737	552,698	567,249	616,711	666,129
Baby health centres, maternity homes, etc. ...	47,594	43,988	45,305	50,734	55,172
Inspection of food, dairies, etc. ...	17,756	16,946	13,456	14,189	14,452
Medical examination of school children	20,939	20,052	20,551	20,727	22,240
Administration medical services, etc. ...	124,635	118,400	127,183	121,275	131,296
Other ...	9,614	11,019	7,409	3,134	10,894
<b>Total ...</b>	<b>1,542,913</b>	<b>1,609,462</b>	<b>1,697,883</b>	<b>1,652,883</b>	<b>1,795,024</b>
<b>Social amelioration—</b>					
Relief of destitute, blind, aged, etc. ...	332,623*	239,707	499,869	352,972	362,439
Maintenance of deserted wives, widows and children ...	502,674*	367,862	324,037	315,050	306,832
Widows' pensions ...	645,457	624,693	529,764	532,416	558,431
Care of aborigines ...	47,885	49,831	49,898	48,301	50,610
Unemployment ...	766,613*	281,295	85,801	83,900	902,015
Food relief ...	5,070,732*	3,511,978	1,467,953	1,076,070	980,760
Family allowances ...	1,805,685*	2,105,359	1,960,972	1,898,315	1,804,393
Administration ...	329,876*†	183,529	221,562	223,883	221,400
Homes for unemployed Trust			200,000		
Other ...	67,245	65,402	59,617	61,821	56,410
<b>Total ...</b>	<b>9,568,790*</b>	<b>7,460,016</b>	<b>5,399,473</b>	<b>4,593,328</b>	<b>5,243,290</b>
<b>Grand Total (State) ...</b>	<b>11,111,703*</b>	<b>9,129,478</b>	<b>7,097,356</b>	<b>6,246,211</b>	<b>7,038,314</b>
<b>Commonwealth—</b>					
Old age and invalid pensions	4,276,522	4,242,582	4,354,786	4,709,580	5,132,722
Maternity allowances ...	149,870	129,740	119,750	130,886	133,055
<b>Total (Commonwealth) ...</b>	<b>4,426,392</b>	<b>4,369,322</b>	<b>4,474,536</b>	<b>4,840,466</b>	<b>5,265,777</b>
<b>Grand Total— (State and Commonwealth) ...</b>	<b>15,538,095*</b>	<b>13,498,800</b>	<b>11,571,892</b>	<b>11,086,677</b>	<b>12,304,091</b>
<b>Expenditure per head of population—</b>	<b>£ s. d.</b>	<b>£ s. d.</b>	<b>£ s. d.</b>	<b>£ s. d.</b>	<b>£ s. d.</b>
By State ...	4 5 7	3 10 6	2 14 3	2 7 5	2 13 0
By Commonwealth ...	1 14 6	1 13 9	1 14 3	1 16 9	1 19 8
<b>Total ...</b>	<b>6 0 1</b>	<b>5 4 3</b>	<b>4 8 6</b>	<b>4 4 2</b>	<b>4 12 8</b>

\* Including payments from Unemployment Relief and Family Endowment Funds which were merged with Consolidated Revenue Fund, in July, 1932.

† Includes interest on Treasury advances to Family Endowment Fund.

The aggregate expenditure in 1935-36 was less, by £3,234,000, than in 1931-32. The expenditure on public health services and on old age and invalid pensions increased in the interval, but there was a decline of more than £4,000,000 in expenditure on food relief. The increase in the aggregate expenditure in 1935-36, as compared with the two preceding years, was due mainly to the greater sum expended from revenue on unemployment relief works and to an increase in old-age and invalid pensions.

#### FOOD RELIEF.

As a means of relieving distress arising from poverty or unemployment the Government has established a system of food relief throughout the State, and this is being re-organised into a social welfare service, so that

clothing, shelter, medical service, etc., may be provided as well as food, with the aim not only to relieve but, as far as practicable, to rehabilitate persons suffering distress.

The food relief system was developed from the activities of charitable societies which distributed relief in co-operation with the Government, such as the Benevolent Society of New South Wales. When the onset of depression brought about a rapid increase in unemployment the existing charitable organisations were unable to provide for all in need of assistance, and the Government gradually took over the function of providing sustenance.

In the metropolitan district and the industrial areas of Newcastle, the northern coalfields and Wollongong, depots were opened for the issue of food relief in co-operation with the State labour exchanges, with definite rules in respect of eligibility and scales of relief.

In the country districts food relief has always been administered by the police. Rules similar to those in the industrial districts apply to other parts of the State but the country police exercise a measure of discretion to determine eligibility in the light of personal knowledge of the applicants.

The general conditions precedent to the issue of food relief are (1) the applicant must have been unemployed for at least 14 days; (2) he must have been registered at a State labour exchange for at least 7 days; and (3) he must sign a declaration that his income during the fortnight preceding application did not exceed a certain limit—known as permissive income—which varies according to the number of his dependants. The condition as to registration for employment does not apply where the applicant is aged or incapacitated or an invalid or a woman responsible for the care of invalids or young children.

When lodging his application for relief, the applicant selects from approved traders the suppliers from whom he wishes to obtain the food, and indicates the proportion of the total value of his food order which he wishes to be allocated to the various traders—grocer, butcher, baker and milk-vendor. When applications are granted, orders to supply food to a specified value are issued direct to the suppliers.

Before each issue of food relief (usually at fortnightly intervals), the applicant is required to sign a declaration that the family income is within the prescribed limit. In assessing the permissive income, the income of all members of the family, except old-age and invalid pensioners, is taken into consideration, and the following items are included: earnings, gifts of money, family allowances, Government charitable allowances (except where paid away in rent), rents from property, 25 per cent. of amounts paid by boarders, military and war widows' pensions in excess of 15s. per fortnight, other pensions and similar payments (excluding old-age and invalid pensions and maternity allowances); as from 1st June, 1937, earnings up to a certain limit have been excluded in assessing the family income. The exemption in the case of each son, daughter, brother or sister in the household of a recipient of food relief is 60s. per fortnight if adult or 40s. if under 21 years of age. Appropriate exemption is allowed also in respect of earnings by the head of the household.

Food relief is not issued where the family income during the fortnight preceding application has exceeded the permissive limit; if the family income is less than this amount and the difference does not exceed two-fifths of the value of the food order, relief at half scale is issued; in other cases as a general rule, relief is issued to the full value at appropriate scale.

Old-age and invalid pensioners in the household are disregarded in the determination of the permissive income limit and the scale of food relief. Children under twelve months are excluded in regard to the relief scale. Special foods may be provided for young children and for invalids upon proof of need. Relief on the same scale as for single adults is issued for juveniles from the age of 15 years, also for children aged 14 years for whom family endowment, or widows' pension, or similar allowance, is not paid.

The scales of permissive income and the value of food orders (exclusive of special foods) are shown below:—

Family Unit.	Limit of Income per Fort-night.	Value of Food Relief per Fortnight.	Family Unit.	Limit of Income per Fort-night.	Value of Food Relief per Fortnight.
Single man or woman	s. 25	s. d. 13 0	Married couple, 3 children	s. 65	s. d. 45 6
Married couple	40	21 6	" " 4 children	70	51 6
" " 1 child	50	33 6	" " 5 children	75	57 6
" " 2 children	60	39 6	Each additional child	10	6 0

In Broken Hill, Silvertown and certain other western towns the scales of food relief are higher than those shown in the foregoing table.

The following statement shows the number of recipients and their dependants for whom food relief was issued in June of each of the last five years; also, for the purpose of comparison, the number of men engaged in part-time employment on relief work:—

Particulars.	June, 1933.	June, 1934.	June, 1935.	June, 1936.	June, 1937.
Food Relief—Recipients	83,151	28,759	25,531	24,988	30,135
Recipients and dependants	192,777	62,341	54,802	58,680	71,615
Relief Workers—Part-time	34,229	75,648	72,373	55,770	14,976

The decline in the number of persons in receipt of food relief in the twelve months ended June, 1934, was due partly to a general improvement in employment but mainly to the transfer of a large number of men to part-time employment under a scheme known as emergency relief work, which is described in the chapter "Employment" of this *Year Book*. Between June, 1934, and June 1936, the number of recipients of food relief and their dependants declined by nearly 3,700, and the part-time relief workers by nearly 20,000. A curtailment of part-time relief work in 1936-37 caused a temporary increase in food relief pending arrangements to provide work for those available for employment.

It has been the practice to increase the food orders issued at Christmas time to the extent of an extra week's relief. At Christmas, 1936, there was given also a cash payment equivalent to a food order for one week and a half. The moneys for the purpose have been provided by the Commonwealth. At the time of the coronation of His Majesty King George VI the State Government granted each recipient of food relief a cash payment equal to one week's food order.

Limited supplies of clothing, boots and blankets have been issued from time to time, since July, 1933, to the more necessitous families in receipt of relief by way of food or part-time employment. Cases of urgent necessity

may be relieved by cash payments for rent, etc., each application therefor being decided upon the circumstances of the case. Measures for assistance in housing the unemployed are described later in this chapter.

#### TREATMENT OF SICKNESS.

Institutions for the treatment of sickness and disease are numerous throughout the State. There are private hospitals which are owned by private persons and conducted as business enterprises; public hospitals which are maintained by the State, or by the people resident in the districts in which the hospitals are located, with the assistance of subsidy from the public funds, or by charitable organisations; special hospitals, State and private, for the treatment of mental and nervous ailments; and a State lazaret.

The State exercises a measure of supervision over the practice of professional persons engaged in the treatment of sickness and disease, and medical practitioners, dentists, pharmacists, and optometrists are required to register with a board established for each profession under statutory authority. At the end of the year 1936 there were on the registers 3,332 medical practitioners, 1,443 dentists, 2,092 pharmacists, and 605 optometrists. There were, in addition, 350 dealers in poison, and 8 persons licensed, under an Act relating to drugs, to manufacture opium and other dangerous drugs, and 58 to distribute them.

Nurses also are required to register in terms of the Nurses Registration Act, 1924, and amendments. Four classes of nurses may be registered, viz., general, mental, midwifery, and infants'. In the case of midwifery nurses, registration must be renewed annually. The number of registrations at 31st December, 1936, was as follows:—General nurses 8,790, midwifery 5,555, mental 992, infants' 81. Information is not available as to the actual number of nurses, as many are registered under more than one classification.

Special arrangements are made to provide for the treatment of sickness and accident in sparsely populated districts. The Government subsidises medical practitioners with a view to encouraging them to practise in outlying bush settlements. Usually the subsidy is the amount necessary to bring their earnings to a certain sum.

Two organisations, the Bush Nursing Association and the Country Women's Association, make provision for nurses in country localities. A local committee supervises the work of the nurse in each district, pays her expenses and fixes charges for her services, etc. Persons in necessitous circumstances are exempt from the payment of the fees. Both these organisations have arranged for the maintenance of cottage homes in a number of remote localities. The cottages serve as residences for the nurses and as accommodation for patients in cases of emergency.

The District Nursing Association engages nurses to visit the sick, gratuitously if needed, in the metropolitan district.

Ambulance transport services for sick and injured persons are controlled by a board, incorporated in 1919. The board delimits certain districts for administrative purposes, and in each district a committee is elected annually by the contributors to its fund.

#### *Private Hospitals.*

A private hospital may not be conducted except under license in accordance with the Private Hospitals Act of 1908, as amended by the Nurses Registration Act, 1924. The legislation applies to all establishments in

which a charge is made for treatment, except those maintained or subsidised by the State or licensed under the Lunacy Act or the Inebriates Act. The licenses are issued annually by the Minister for Public Health on the recommendation of the Board of Health, and it is prescribed that every private hospital must be under the direct control of a person approved by the Board. Licensees are required to comply with regulations as to structure, management, and inspection.

At 31st December, 1936, the private hospitals numbered 650, viz., 253 in the metropolitan district and 397 in the country, and the total number of beds available was 5,826. The classification of the hospitals and their accommodation, according to the nature of the cases received, are shown in the following statement:—

District.	Private Hospitals.				Number of Beds.			
	Medical, Surgical, and Lying-in.	Medical and Surgical.	Lying-in.	Total.	Medical, Surgical, and Lying-in.	Medical and Surgical.	Lying-in.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.
Sydney ... ..	99	38	116	253	1,937	691	466	3,094
Coantry ... ..	206	13	178	397	1,848	151	733	2,732
Total ... ..	305	51	294	650	3,785	842	1,199	5,826

The number of private hospitals was 659 in December, 1929, when there were 285 in Sydney and 374 in the country. The number rose gradually to 707 in 1934, then declined to 635 in 1935. In 492 hospitals the accommodation at the end of 1936 did not exceed 10 beds, in 111 there were from 11 to 20 beds, and in 47 hospitals there were more than 20 beds.

#### *Public Hospitals.*

Institutions for the care of the sick are classed as public hospitals, unless they are owned and maintained entirely by private persons. Some are maintained wholly by the State, viz., a convalescent hospital in the metropolitan area, the Sanatorium for Consumptives at Waterfall, the David Berry Hospital at Berry, and the hospitals attached to the asylums for the infirm at Newington, Lidcombe and Liverpool (see page 235). The Prince Henry Hospital, formerly a State institution known as the Coast Hospital, was incorporated under a board of directors in August, 1936, and brought within the purview of the Hospitals Commission.

Some of the public hospitals are under the ægis of religious denominations, and are conducted by religious communities who own the establishments or by committees nominated by subscribers. They are open to persons of all creeds, and the majority of them receive a subsidy from the State.

By the Public Hospitals Act, passed in 1929 and amended in 1934, provision has been made for a systematic organisation of the public hospital services. The Act is administered by the Hospitals Commission, which is constituted by the Minister for Public Health as chairman and four other members appointed by the Governor. One of the members is vice-chairman, exercising powers and authorities delegated by the chairman. Members other than the chairman and vice-chairman are remunerated by fees.

The public hospitals are classified in two main groups, according to the schedules of the Act. One group, termed the "incorporated hospitals," consists entirely of suburban and country hospitals incorporated by the Act. The second group, known as "separate institutions," includes the

large general hospitals in or around the metropolis; the Newcastle Hospital; the hospitals for women, children, tubercular cases, convalescents, or incurables; the dental hospital; the hospitals conducted by religious organisations; and a few country hospitals.

Each incorporated hospital is managed by a board of directors elected triennially by the subscribers, or appointed by the Governor, on recommendation of the Commission. A person who contributes as member of a contribution scheme or otherwise, except by way of payment for relief, an amount of at least ten shillings is deemed to be a subscriber for the year in which the amount is paid; also persons nominated by firms or associations who contributed to the funds of the hospital, the number of nominees being fixed according to the amount contributed. Persons who render meritorious service to a hospital or contribute £10 in one sum may become life members.

The Act defines the liability of patients to pay a reasonable sum for the cost of hospital services and such sum is recoverable in the courts of law, though destitute persons may not be refused relief by reason only of inability to pay therefor. If authorised by the Commission, portion of a hospital may be set aside for paying patients, who may contract for private or intermediate accommodation.

It is the duty of the Hospitals Commission to inspect the hospitals which receive or apply for subsidy, to report to the Government as to the amount of State aid required to meet the needs of the hospitals, to determine which hospitals shall be subsidised, and the amount of subsidy to be paid to each institution. Under certain conditions the Commission may exercise special powers to close or amalgamate incorporated hospitals with a view to effective and economical administration, or to authorise the board of a hospital to provide accommodation for the treatment of infectious diseases, or convalescent or incurable cases, or to define the functions and activities of a hospital.

Moneys appropriated by Parliament for the assistance of hospitals are paid into the Hospital Fund administered by the Commission. The receipts and expenditure of this fund during the years 1930-31 to 1935-36 are shown below. The figures do not cover any transactions relating to State institutions, so that disbursements from the Hospitals Fund represent only portion of the Government expenditure on hospitals.

Year ended June.	Receipts.				Expenditure.			
	Transfers from—		Other.	Total.	Admini- stration.	Subsidies to Hospitals, etc.	Grants for Buildings, etc.	Total.
	Consoli- dated Revenue Fund.	Unem- ployment Relief Fund.						
	£	£	£	£	£	£	£	£
1931 ...	433,527	48,250	27,223	509,000	5,566	428,949	73,723	508,238
1932 ...	520,892	5,150	10,824	536,866	5,050	508,642	16,766	530,468
1933 ...	710,000	169,179	33,832	913,011	5,082	682,897	184,771	872,750
1934 ...	705,238	191,334	62,581	959,153	5,745	633,611	269,083	908,439
1935 ...	606,181	251,171	67,656	925,008	6,685	613,903	250,826	871,414
1936 ...	661,809	71,621	160,506*	893,936	6,661	657,810	320,688	985,099

\* Including £56,621 transferred from General Loan Account.

† Including £159,224 for the liquidation of debt arrears.

The receipts classified as "other" consisted for the most part of contributions by the hospitals towards the cost of new buildings, and sundry repayments, which amounted to £69,626 and £30,831, respectively, in 1935-36.

The subsidies to hospitals represent proceeds of the State lotteries (see page 262). In 1935-36 the amount of £654,243 was distributed in 164 institutions, viz., £389,857 to 29 metropolitan institutions and £264,386 to 135 in the country districts. The largest subsidies to metropolitan hospitals were Sydney £61,913, Royal Prince Alfred £76,442, Royal North Shore £41,722, Royal Alexandra for Children £35,000. The Benevolent Society of New South Wales was allotted £24,000 for three institutions, and subsidies were granted to the Women's Hospital, Crown-street, £12,000, and the Royal South Sydney £9,367. St. George District Hospital received £16,800 and Balmain £10,500. Subsidies to institutions outside the metropolitan area included £36,061 to Newcastle, £19,126 to Broken Hill, £10,000 to Cessnock, £8,293 to Kurri Kurri Hospital, and £5,480 to Wallsend Hospital. The hospitals conducted by religious organisations were subsidised to the extent of £45,667, viz., £37,467 to five institutions in the metropolitan district and £8,200 to eight in the country.

Particulars relating to the accommodation provided in hospitals under the supervision of the Hospitals Commission and the number of patients treated are shown below:—

Year ended June.	Hospitals.	Beds.		Patients treated in Hospital.	Out-Patients.	
		Number Available.	Number Occupied. Daily Average.		Number.	Attendances.
1931 ... ..	170	*	6,610	142,548	443,676	1,164,613
1932 ... ..	172	*	6,481	146,361	481,170	1,315,491
1933 ... ..	174	10,160	6,896	154,083	532,416	1,211,985
1934 ... ..	173	10,953	7,538	169,243	576,548	1,491,196
1935 ... ..	173	11,781	8,069	181,097	503,689	1,458,344
1936 ... ..	172	12,223	8,621	199,484	563,918	1,602,863

\* Not available.

The patients treated in the hospitals included 52,321, or 26.2 per cent. of the total, for whom no charge was made. Their average stay in hospital was 16.1 days, and the average of all patients was 15.8 days.

In addition to the accommodation provided by public hospitals to which the foregoing particulars relate, there were 2,147 beds in the State hospitals, at the asylums for the infirm (see page 235), the Waterfall Sanatorium, and the David Berry Hospital. The average number of beds occupied per day was 1,978, and 7,380 patients were treated during the year 1936.

The receipts of the public hospitals (excluding State institutions) amounted to £1,919,554 in 1935-36. State aid, £880,184, represented 46 per cent. of the total, and consisted of subsidies £664,090, grants £175,008, and loans £41,086. Patients' contributions £414,979, or 22 per cent., have increased in each of the last four years. The contributions paid while in hospital do not constitute the total payments by patients, as many of them pay also in the form of systematic or other contributions. The amount of systematic contributions, which represented 12 per cent. of the receipts in 1935-36, was nearly twice the amount received in 1932-33. Salaries and wages absorb half the expenditure on maintenance. Loan receipts, which

are included in the figures, amounted to £123,495 in 1935-36, and this sum was expended during the year on buildings and equipment. Particulars relating to receipts, expenditure, and funds in the last five years are shown in the following statement:—

Year ended June—	Receipts.						
	State Aid.		Subscription and Donations.	Systematic Contribu- tions.	Patients' Contribu- tions.	Other.	Total Receipts.
	Buildings and Equipment.	Subsidy.					
	£	£	£	£	£	£	£
1932 ...	12,312	509,512	185,959	93,823	276,709	145,330	1,223,645
1933 ...	104,274	688,232	192,947	117,864	294,989	71,032	1,469,338
1934 ...	210,787	629,497	215,278	133,315	365,575	77,157	1,631,609
1935 ...	203,655	617,248	222,038	198,099	370,816	55,507	1,667,393
1936 ...	216,094	664,090	247,665	233,640	414,979	143,086	1,919,554

Year ended June—	Expenditure.					Funds at end of Year.	
	Maintenance and Expenses.			Buildings and Equipment.	Total Expenditure.	Current Accounts Debit Balance.	Invested.
	Salaries and Wages.	Other.	Total.				
	£	£	£	£	£	£	£
1932 ...	618,766	530,975	1,149,741	110,870	1,260,611	477,175	690,185
1933 ...	591,484	555,611	1,147,095	190,711	1,337,806	224,051	644,231
1934 ...	621,377	564,516	1,185,893	224,506	1,410,399	181,789	739,168
1935 ...	679,090	668,977	1,348,067	140,611	1,488,678	282,277	745,942
1936 ...	740,093	741,862	1,481,955	414,810	1,896,765	319,708	680,003

### *Hospital Contribution Funds.*

Systematic contribution schemes have been organised in respect of a number of public hospitals.

For the hospitals in the Metropolitan area a joint scheme, the Metropolitan Hospitals Contribution Fund, was established in July, 1932, and incorporated on 15th August, 1933. It absorbed an industrial contributions scheme already operating in connection with the Hospital Saturday Fund, a charitable organisation, which for many years had been collecting subscriptions and donations for the hospitals. Contributors to the Metropolitan Fund pay at the rate of 6d. per week (minors 3d.), and this entitles them to certain hospital benefits in respect of treatment in private as well as public hospitals. During 1937 the scheme was extended to enable members to contribute at higher rates for increased benefit. From its inception to 30th June, 1936, an amount of £224,506 had been distributed to metropolitan public hospitals affiliated with the Fund, £41,046 to State and non-affiliated public hospitals, and £83,616 to private hospitals.

In the country many individual hospitals have organised a systematic contribution fund, and benefit is provided by each fund for treatment of contributors and dependants in other hospitals as well as the institution to which the fund belongs.

Particulars regarding the operations of the funds in the years ended June, 1935 and 1936, are shown below:—

Particulars.	Metropolitan Fund.		Country Funds.	
	1934-35.	1935-36.	1934-35.	1935-36.
Contributors at 30th June (approximate) ...	No. 156,204	No. 201,000	No. 128,521	No. 149,145
Contributors and Dependants for whom Benefit was Paid ...	23,900 £	31,000 £	26,966*	31,388*
Income ...	125,201	175,426	162,285	187,448
Expenditure—Paid to Hospitals ...	106,343	148,008	140,708	177,283
Administrative ...	12,894	16,421	18,478	21,518
Total ...	£ 119,237	164,429	159,186	198,801

\*Exclusive of contributors treated in hospitals other than that to which the particular fund belonged

#### TREATMENT OF COMMUNICABLE DISEASES.

Within the State, the Board of Health is vested with authority to make provision for the treatment and prevention of infectious diseases. The Federal Government is responsible for the administration of the quarantine laws in respect of vessels, persons, and goods arriving from overseas ports.

Cases of such diseases as leprosy, bubonic plague, smallpox, scarlet fever, typhoid fever, diphtheria, infantile paralysis, cerebro-spinal meningitis, puerperal infection, typhus, yellow fever, cholera, pulmonary tuberculosis, and encephalitis lethargica, must be notified to the Board of Health. Cases of bubonic plague are rare; no case has occurred since 1923.

Where necessary, provision is made for the isolation of infectious cases. In the metropolis the majority are treated at the Prince Henry Hospital, or at an infectious diseases hospital at Lidcombe, both being State institutions. Country cases are accommodated in special wards of the local hospitals.

The following table shows the notifications of the various diseases in 1921 and later years. Particulars relating to the deaths and death rates are shown in the chapter relating to Vital Statistics:—

Disease.	1921.	1931.	1935.	1936.				
				Metro- politan District.	Hunter River District.	Broken Hill District.	Other Districts.	Total.
Typhoid Fever ...	949	340	173	53	8	8	63	132
Scarlet Fever ...	1,060	4,447	2,250	2,698	115	13	1,113	3,939
Diphtheria... ..	6,854	4,432	4,913	3,189	784	10	3,081	7,064
Infantile Paralysis ...	184	103	183	8	1	...	13	22
Cerebro-Spinal Meningitis ...	30	30	20	7	1	...	3	11
Encephalitis Lethargica ...	†	20	7	4	...	...	3	7
Pulmonary Tuberculosis ...	1,240	1,588	1,572	1,022	87	9	254	1,372
Leprosy ...	2	2	3	2	...	...	1	3
Bubonic Plague ...	2	...	...	...	...	...	...	...
Puerperal Infection ...	*	319	266	237	9	43	37	326
Typhus Fever ...	...	1	8	3	...	...	1	4

\*Notifiable since 16th August, 1929.

†Notifiable since 1st April, 1926.

### *Leprosy.*

Persons suffering from leprosy are segregated in the Leper Lazaret, which was opened for the admission of patients in 1883, though statutory provision for the compulsory notification of the disease and detention of lepers was not made until 1890. In 1936 three persons were admitted, and one died; two were discharged and three foreigners were repatriated. There were 16 inmates in the lazaret on 31st December, 1936, viz., 13 males and 3 females. Their birth-places were—New South Wales 10, Western Australia, England and Straits Settlements 1 each. Two were born in China and 1 in the Pacific Islands. The cost of management during 1936 was £3,286, or £183 7s. 5d. per inmate.

### *Tuberculosis.*

Pulmonary tuberculosis has been notifiable throughout the State since 1st March, 1929. During the year 1936 the notifications numbered 1,372, viz., 1,022 in the metropolitan sanitary district, 87 in the Hunter River district, 9 in the district of Broken Hill, and 254 in the remainder of the State.

A remarkable reduction in the mortality from tuberculosis has been effected as a result of measures for the protection of the milk and food supply, the supervision of immigration, a stricter regulation of conditions of employment, and improved methods of medical treatment. Nevertheless, tuberculosis causes about  $4\frac{1}{2}$  per cent. of the deaths in New South Wales, and while so many new cases occur in each year there is pressing necessity for organised efforts to control the disease.

A special division of the Department of Public Health has been formed to co-ordinate measures for the cure and prevention of the disease, to regulate the admission of patients to institutions, to arrange for the after-care of those discharged, etc.

Institutions for the care of tubercular cases have been established by the Governments of the State and the Commonwealth, and others are assisted by State subsidy. As far as practicable the cases are graded for admission to the sanatoria. The Waterfall Sanatorium contains 400 beds for patients in the intermediate stages of the disease, and a branch of the Prince Henry Hospital with 90 beds for advanced patients is located at the Prince of Wales (Repatriation) Hospital. Both these are State Government institutions. The Government of the Commonwealth controls two institutions for returned soldiers with accommodation for 142 patients. The Queen Victoria Homes at Thirlmere and Wentworth Falls, with 108 beds for patients in the early stages, and three sanatoria administered by the Red Cross Society with 139 beds, are subsidised by the State Government. There are 8 beds in the R. T. Hall Sanatorium at Hazelbrook and about 40 beds in private hospitals.

The Waterfall Hospital is the largest of the sanatoria. The number of patients under treatment during 1936 was 881, and there were 388 in the hospital at the end of the year. The cost of maintenance in 1936 was £32,701, equal to £85 per occupied bed.

A village settlement for tubercular cases was opened at Picton Lakes in May, 1929. It was founded and is maintained by public subscription and admission is arranged by the Department of Public Health. There are 19 cottages for married patients and two hostels for single patients. The number of residents at the end of 1936 was 71, including the families of patients.

With the object of checking the spread of tuberculosis, dispensaries have been opened for diagnosis and the examination of patients and the supervision of those who are not under treatment in an institution. There are

three dispensaries in Sydney. One was opened in 1912 by the National Association for the Prevention and Cure of Consumption (now known as the Anti-Tuberculosis Association of New South Wales). The others are attached to the Royal Prince Alfred and the Royal North Shore Hospitals respectively. There is a dispensary also at the Newcastle Hospital. Medical advice is given to patients at these clinics, and nurses visit their homes and instruct the inmates in precautionary measures to prevent the spread of the disease.

#### *Venereal Diseases.*

The treatment of venereal diseases is regulated under the Venereal Diseases Act, 1918, which came into operation on 1st December, 1920. It prescribes that all persons suffering from such diseases must place themselves under treatment by a qualified medical practitioner, and must remain under treatment until cured. Medical practitioners are required to notify all cases to the commissioner appointed under the Act. It is not considered, however, that notification is fully effective. Treatment by unqualified persons is prohibited, also the sale of certain drugs used in connection with these diseases, except when prescribed by a qualified medical practitioner.

There are ten clinics in operation in the metropolitan district, of which nine are established at public hospitals. Free treatment is provided at other subsidised hospitals, drugs and instruments being provided by the Government. Special wards for these cases have been opened at the Prince Henry (formerly Coast) Hospital, and at the Newington State Hospital, and there is an isolation block at the Royal Prince Alfred Hospital.

The notifications during the year 1936 numbered 5,160, of which 4,599 cases were notified in the metropolitan area and 345 in the Newcastle district. About 74 per cent. of the cases were notified by public hospitals and clinics.

Prisoners suffering from venereal diseases are detained for treatment in lock hospitals attached to the gaols, in terms of the Prisoners Detention Acts, 1908 and 1918. Such prisoners may be detained even after the definite sentence is served, until certified by the medical officer as free from disease. During the year ended 30th June, 1936, the cases of venereal diseases treated in the gaols numbered 90, including 45 cases treated but not subject to the Act, and orders for detention in the lock hospitals were obtained in the cases of 36 men and 9 women.

#### TREATMENT OF MENTAL DISEASES.

The law relating to persons suffering from mental diseases is contained in the Lunacy Act of 1898 as amended in 1934. Its provisions apply mainly to those who may be certified as insane and incapable of managing their affairs, but voluntary patients may be received. Insane persons may be admitted to an institution, if certified by two qualified medical practitioners, either at the request of relatives or friends, or upon the order of two Justices of the Peace, but relatives have the right of custody of insane persons brought before the Justices if they can give a satisfactory assurance that proper care will be taken of them. Persons found to be insane by proceedings before the Supreme Court in its lunacy jurisdiction may be admitted to mental hospitals upon the order of the Judge. Voluntary patients may be received with the consent of the Inspector-General into hospitals for the insane and licensed houses, but may not be detained for more than seven days after written notice is given by the patient of his intention or desire to leave.

The influx of insane persons to New South Wales is restricted under the Lunacy Act, which renders the owner, charterer, agent, or master of a vessel liable for the maintenance of any such person landed in the State.

The estates of persons proved to be incapable, through mental infirmity, of managing their affairs, are placed under the management and care of the Master in Lunacy. Estates of voluntary patients are placed under his care only at the written request of the patient.

Special courses of training in the treatment of mental and nervous diseases are provided for medical students at the Sydney University, where a chair of psychiatry has been established.

### *Mental Hospitals.*

The Government has set apart a number of institutions for the reception and treatment of insane persons, and private institutions may be licensed for the purpose. Licenses may be granted also for the reception of a single patient, but unauthorised persons are not permitted to take charge for profit of a person of unsound mind. All institutions for mental cases, including reception houses, etc., for their temporary accommodation, are subject to inspection by the Inspector-General of Mental Hospitals. With his consent, harmless patients may be boarded out or released on leave, or they may be discharged to relatives or friends who undertake to care for them. Official visitors may be appointed for every hospital and reception house, one being a medical practitioner and one a police magistrate or barrister-at-law. Two or more of these visitors, one being a medical practitioner, visit these institutions at least once a month, and they are empowered to hold inquiry at the request of a patient or his relatives or friends, and, if satisfied by the certificate of two psychiatrists, may discharge the patient.

There are ten Government mental hospitals, at one of which there is also a hospital for criminal insane, and two private institutions licensed to receive mental patients. Under an arrangement with the Government of South Australia, patients from Broken Hill are accommodated in a hospital in that State, the cost of their maintenance being paid by the Government of New South Wales.

The number of mental patients under cognisance as being of unsound mind on 30th June, 1936, consisted of 5,470 males and 4,777 females in mental hospitals and licensed houses in New South Wales; 4 men and 5 women from this State in South Australian hospitals; and 372 men and 390 women on leave from the institutions. The total number of persons under cognisance, exclusive of voluntary patients, at intervals since 1901 is shown below:—

At 30th June.	Number of Mental Patients.			Proportion per 1,000 of Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
1901*	2,684	1,804	4,488	3·72	2·75	3·26
1911*	3,810	2,573	6,383	4·27	3·18	3·75
1921	4,510	3,432	7,942	4·21	3·33	3·78
1931	5,346	4,357	9,703	4·12	3·47	3·80
1932	5,467	4,459	9,926	4·18	3·51	3·85
1933	5,514	4,619	10,133	4·21	3·60	3·90
1934	5,590	4,787	10,377	4·21	3·71	3·96
1935	5,731	4,959	10,690	4·28	3·80	4·04
1936	5,846	5,172	11,018	4·34	3·92	4·13

\* At 31st December.

The proportion of the population under official cognisance as mental patients is increasing. In order to ascertain the general rate of insanity amongst the population it would be necessary to take into consideration the patients treated in their homes and those suffering from mental disorders in a form which does not warrant certification as insane nor compulsory detention in a mental hospital.

By amendment of the law in 1934 provision was made for the admission of voluntary patients to mental hospitals in order to encourage treatment in the early stages of mental derangement. Steps towards meeting the needs of such persons had already been initiated by the establishment of a psychiatric clinic for voluntary patients suffering from the milder forms of mental and nervous disorders. During the year 1935-36 the number of resident patients under treatment at the clinic was 950, and there were 248 in the institution at 30th June, 1936. Outdoor treatment is provided also. Voluntary patients are treated at the other mental hospitals, and the total number resident at 30th June, 1936, including those at the psychiatric clinic, was 470, viz., 252 males and 218 females. Psychiatric clinics have been established at a number of general hospitals.

A charitable organisation, the After Care Association, assists in the rehabilitation of discharged patients, and has established a small hostel for women discharged from the mental hospitals.

Reception houses have been established in Sydney, Newcastle, Kenmore (Goulburn), and Orange, where persons showing symptoms of mental diseases are placed under observation and cases of short duration are treated. Provision to facilitate admission to reception houses, voluntarily and otherwise, is contained in the Lunacy (Amendment) Act, 1934. The number of persons under observation and care was 1,815 in 1935-36, and 1,321 were transferred to mental hospitals during the year. At the State Penitentiary at Long Bay 87 persons were under observation during 1935-36, and 39 were sent to mental hospitals.

The number of admissions and re-admissions to mental hospitals in various years since 1901 are shown below:—

Year ended 30th June.	Admissions.			Re-admissions.		
	Males.	Females.	Total.	Males.	Females.	Total.
1901*	387	309	696	77	75	152
1911*	674	387	1,061	113	73	186
1921	711	622	1,333	115	106	221
1931	724	600	1,324	124	120	244
1932	684	575	1,259	129	60	225
1933	674	609	1,283	96	113	209
1934	645	616	1,261	129	132	261
1935	731	666	1,397	131	117	248
1936	754	689	1,443	130	155	294

\* Calendar Year.

Of the admissions and re-admissions in 1935-36, natives of New South Wales numbered 1,177, England 184, Ireland 39, Scotland 58, other British countries 223, foreign countries 54, and in 2 cases the nationality was unknown.

During 1935-36 the deaths numbered 659, or 6.5 per cent. of the average number resident, and the discharges included 469 persons, or 4.6 per cent., who had recovered, and 194, or 1.9 per cent., who had been relieved.

The average weekly cost of maintaining mental patients in Government institutions during the year 1935-36 was 23s. 6d. per patient, of which the State paid 19s. 7d., the balance being derived from private contributions. The following table shows the average weekly cost per patient during the years cited:—

Year ended 30th June.	Annual Cost of Maintenance of Patients.	Cost of Maintenance per Patient per week.		
		To State.	Private Contributions.	Total.
	£	s. d.	s. d.	s. d.
1921	512,797	23 10	3 3	27 1
1929	658,755	24 1	4 11	29 0
1931	613,665	21 0	4 6	25 6
1932	541,957	18 2	3 10	22 0
1933	532,277	16 7	4 3	20 10
1934	522,682	16 5	3 11	20 4
1935	583,150	18 3	3 10	22 1
1936	638,308	19 7	3 11	23 6

Variations in the cost of maintenance are due mainly to changes in rates of wages and in the prices of provisions. The cost of voluntary patients is included. During the year ended June, 1936, salaries and fees amounted to £423,892 the cost of provisions, stores, etc., was £144,219, fuel, light and water, £23,035; and miscellaneous items, £47,162. In addition, farm products to the value of £16,810 were grown and consumed at the institutions, and a sum of £73,239 (not chargeable to maintenance of patients) was expended on new works.

#### DEAF-MUTISM AND BLINDNESS.

The number of persons who were deaf and dumb, as ascertained at the census of 1933, was 982, equivalent to one person to every 2,649 of the population, and the number of persons afflicted with blindness was 1,413 or one person in every 18,407. A classification according to ages is shown below:—

Age Group.	Deaf Mutes.			Blind Persons.			Per 1,000 of Population.	
	Males.	Females.	Total.	Males.	Females.	Total.	Deaf Mutes.	Blind.
14 years and under ...	120	75	195	41	32	73	·26	·10
15-39 years ...	283	236	519	135	81	216	·50	·21
40-64 „ ...	121	106	227	289	151	440	·34	·66
65 years and over ...	14	25	39	359	321	680	·25	4·37
Not stated ...	1	1	2	3	1	4	...	...
Total ...	539	443	982*	827	586	1,413*	·38	·54

\* Including 5 males and 6 females who were blind deaf mutes.

The care and education of the deaf and dumb and the blind are undertaken at several institutions. The New South Wales Institution for the Deaf and Dumb and the Blind is maintained partly by Government subsidy and partly by public subscriptions. Special educational courses are provided, the fees being remitted in cases of financial inability. The Sydney Industrial Blind Institute undertakes the care of the adult blind,

and provides industrial training to enable them to earn a livelihood. Homes for the blind are conducted in connection with this institution, and a free circulating library of embossed books is provided. Institutions for deaf mutes are conducted by Roman Catholic religious societies, at Waratah for girls and at Castle Hill for boys.

Under the Commonwealth invalid pension system provision is made for the payment of pensions to permanently blind persons above the age of 16 years.

#### WELFARE OF CHILDREN.

The Child Welfare Act of 1923 and its amendments make provision for the care and maintenance of State wards and for the supervision of children in foster homes and in institutions, for protecting children from ill-treatment and neglect, for preventing their employment in dangerous occupations, and for regulating the adoption of children and their employment in public performances and in street trading. Special courts, called Children's Courts, are maintained to deal with offences committed by or against children, and to adjudicate in regard to affiliation proceedings.

Orders of a magistrate to compel parents to meet the obligation of maintaining their legitimate children are made in terms of the Deserted Wives and Children's Acts of 1901 and amendments.

The State pays allowances under the Widows Pensions Act to assist widows to maintain their children during the years of dependency, and family allowances are paid under the Family Endowment Act for the upkeep of children in families with limited means.

In legal disputes regarding the guardianship of infants, the Supreme Court, or in certain cases the lower courts, may make orders as to the custody and as to access by either parent, having regard to the welfare of the child. In such cases the mother has equal rights with the father as to guardianship, in terms of the Guardianship of Infants Act, 1934.

The Notification of Births Act of 1915 requires that in proclaimed districts the health authorities must be notified within thirty-six hours of the birth of a child. In this manner cases in which advice or assistance is needed are brought under cognisance. A federal law authorises the payment of an allowance to mothers, to assist in defraying the expenses incidental to childbirth where the family income is within a certain limit.

The Juvenile Smoking Suppression Act and the Liquor Act prohibit the use of tobacco by juveniles and the supply of intoxicating liquor to them, and the Public Instruction Act requires children between the ages of 7 and 14 years to attend school regularly. The employment of children in factories and in industrial apprenticeship is subject to laws which are discussed in the chapters relating to Factories and to Employment.

#### *Maternity Allowances.*

The Maternity Allowances Act of the Commonwealth, came into operation on 10th October, 1912, to provide for the payment to mothers of a sum of £5 in respect of each birth occurring in Australia. The allowance was reduced to £4 in July, 1931, and payment was restricted to cases where the income of the claimant and her husband (or in the case of a posthumous or ex-nuptial child, the income of the claimant) did not exceed £260 during

the preceding twelve months. In October, 1932, the income limit was fixed at £208. In August, 1934, it was provided that the allowance would be payable where the income did not exceed £208, plus £13 for each other child under 14 years of age in the family up to a maximum of £299, and the allowance was increased by 5s. for each such child up to a maximum of £5. Since September, 1936, the income limit has ranged from £221 to £321 according to the number of children in the family.

Payments are made in respect of still-born children if viable, but one allowance only is payable in the case of plural births. The allowances may be paid only to women who are inhabitants of, or who intend to settle in the Commonwealth, and they are not payable to Asiatics or to aboriginal natives of Australia or of the Pacific Islands.

The following statement shows the number of claims passed for payment in New South Wales in the years stated, in comparison with the number of confinements:—

Year ended June.	Amount of Allowance.	Income Limit.	Confinements (excluding Still-births) (approximate).	Claims passed for Payment.	
				No.	Amount.
	£	£	No.		£
1921 ... ..	5	No limit.	54,620	56,378	281,890
1929 ... ..	5	"	53,310	54,275	271,375
1930 ... ..	5	"	51,230	52,335	261,675
1931 ... ..	5	"	50,530	51,660	258,300
1932 ... ..	4	260	45,230	36,569	149,870
1933 ... ..	4	{ 260 208 (Oct.) }	44,400	31,699	126,740
1934 ... ..	4	208	42,740	29,960	119,750
1935 ... ..	4 to 5	208 to 299	43,150	30,354	130,886
1936 ... ..	4 to 5	208 to 299	44,650	30,463	133,055

While the allowances were payable without regard to parents' income, the number of claims passed for payment usually exceeded the number of confinements. This was due mainly to the fact that still-births were not included in the number of confinements, though maternity allowances were payable in respect of the births of viable children. After the income limit was imposed the proportion of claims dropped below 81 per cent. in 1931-32, and with further restriction in respect of income it was 70 per cent. in the next three years. Notwithstanding a mitigation in the income limit where there were elder children in the family, the proportion declined to 68 per cent. in 1935-36. This may be attributed in part to a higher proportion of first births amongst those which occurred in that year and for such families the income limit remained at £208; and in part to an improvement in the financial circumstances of the families so that a greater proportion were excluded by reason of the income limit.

The maternity allowances paid in New South Wales up to 30th June, 1936, numbered 1,146,860 and amounted, in the aggregate, to £5,600,000 approximately.

#### *Baby Health Centres and Day Nurseries.*

With the object of reducing the wastage of child life due to preventable causes the Government has established baby health centres in various parts of the city and suburbs, and in country towns.

A staff of nurses and an honorary medical officer are attached to each centre. The nurses instruct the mothers in hygiene at the centres and in their homes, and make arrangements for medical or dental treatment of mothers and children when necessary.

In December, 1936, there were 160 centres, viz., 51 in the metropolitan area, 17 in the district of Newcastle, 4 in Broken Hill, and 88 in other country districts. During the year 1936 the attendances at the centres numbered 674,588, and the nurses made 72,652 visits to cases within the area served by the centres.

The Royal Society for the Welfare of Mothers and Children, incorporated in 1919, was established with the object of co-ordinating measures for the welfare of mothers and children. The society provides premises in two localities in the city for use as baby health centres, day nurseries and free kindergartens, and conducts three training schools, where nurses may receive post-graduate training in infant hygiene and mothercraft. Associations of medical practitioners and of nurses, charitable organisations and institutions for children are affiliated with the Society.

Six day nurseries have been established in the metropolis by the Sydney Day Nursery Association. Mothers who work outside their homes may leave their children at the nurseries during the daytime. Food, clothing and medical care are provided, and at three of the nurseries there are nursery schools. The charge is 6d. per day.

In the outlying country districts nurses engaged by the Bush Nursing Association at 62 centres give assistance to mothers and advise them as to the feeding and treatment of children, and the Far West Children's Health Scheme conducts four travelling baby health clinics, including one equipped for air transport. The Society for Crippled Children assists such children in the matter of surgical treatment and in vocational training.

#### *Adoption of Children.*

Legal provision is contained in the Child Welfare Act for the permanent adoption of children upon order of the Supreme Court in its equitable jurisdiction. Application to the court may be made by adopting parents or by the Minister of Public Instruction on their behalf. If over 12 years of age, the child's consent to adoption is necessary, unless the court dispenses with it owing to special circumstances.

An order of adoption terminates all rights and liabilities between the child and his natural parents, except the right to inherit property by reason of kinship. An adopted child takes the surname of his adopting parent in substitution for his own surname, and orders of adoption are registered by the Registrar-General. Application for orders of adoption may be heard in open court, or in public or in private chambers.

The number of children who had been adopted in accordance with the provisions of the Act up to 31st December, 1936, was 7,913, of whom 837 were adopted in 1936.

#### *Deserted Children.*

In cases of desertion of wife or of legitimate children, the husband or father may be ordered, in terms of the Deserted Wives and Children Acts, to pay periodical contributions for their support. In cases relating

to ex-nuptial children the father may be ordered, under the Child Welfare Act, to pay the expenses incidental to birth and periodical contributions for maintenance. In certain cases mothers may be required to contribute towards the support of their children.

For disobedience of or non-compliance with orders under these Acts offenders may be fined, or they may be committed to prison, and from the value of their work while in prison the cost of their upkeep may be deducted and the balance applied to the satisfaction of the orders. The period of imprisonment is limited to one day for every 4s. due and an offender may not be detained for a longer period than twelve months.

Legislation has been enacted to provide for reciprocity in respect of orders for maintenance between New South Wales and other parts of the British Empire.

The following statement shows the number of cases in respect of wife and child desertion dealt with in the Courts of Petty Sessions and the Children's Courts during the year 1936:—

Cases.	Applications for Orders.			Non-compliance with Orders.		
	Order made.	Order refused.	Case with-drawn.	Order obeyed subsequently.	Defendant imprisoned.	Case with-drawn or dismissed.
For maintenance—Wife ...	1,267	404	739	1,364	261	891
Child ...	467	66	87	711	104	369
For expenses incidental to birth of illegitimate child ...	167	29	39	16	6	7
Total ...	1,901	499	865	2,091	371	1,267

#### *Children under State Supervision.*

The function of supervising the children under the care of the State is exercised by the Child Welfare Department. The cost of the departmental services, which do not include widows' pensions nor family allowances, amounted to £411,384 in the year 1936. The annual expenditure during the last five years is shown below:—

Year.	Boarding out.	Payments for Children in their own homes.	Institutions, Homes, Hostels, etc.	Salaries.	Miscellaneous.	Total Expenditure.	Contributions by Parents and other Revenue.	Net Expenditure.
	£	£	£	£	£	£	£	£
1932 ...	107,059	273,278	33,136	81,377	30,754	525,604	17,227	508,377
1933 ...	98,846	231,824	36,920	69,315	17,436	454,341	19,560	434,781
1934 ...	93,626	223,298	47,204	69,286	16,380	449,794	17,014	432,780
1935 ...	90,145	219,910	46,902	69,263	13,553	439,773	19,742	420,031
1936 ...	88,913	218,198	35,946	73,382	15,596	432,035	20,651	411,384

The decline since 1932 has been due partly to a decrease in the number of children under supervision and partly to a reduction in the cost of maintaining those who are boarded out. Only a relatively small amount is contributed by parents and relatives.

In the following statement is shown a classification of the children under the supervision of the Child Welfare Department in various years since 1911:—

Classification.	1911.	1921.	1931.	1934.	1935	1936.
State wards { Boarded out, adopted or apprenticed ... .. In depots, homes or hostels ... ..	4,677	5,439	5,054 230 1,009	4,046 223 715	4,056 236 563	4,057 243 607
Juvenile offenders in State institutions or shelters ...						
On probation from Children's Courts or institutions						
Children boarded-out with own mothers ... ..	1,148	1,381	4,858	4,600	3,636	3,554
In licensed foster homes ...	4,453	11,462	11,184	10,328	10,030	10,032
In licensed foster homes ...	559	290	382	292	309	295
In licensed institutions ...	263	689	809	829	910	1,187
Total ... ..	11,100	19,261	23,526	21,033	19,740	19,975

These figures do not include the children who are licensed for employment in theatres or for street trading under conditions which are described later.

#### *State Wards.*

The State wards are orphans or children who by reason of parental neglect or unfitness for guardianship or other cause have to be removed from the control of natural guardians. Where practicable, these children are boarded out with approved foster parents until they are 14 years of age. The maximum number of children under the care of one guardian is three, except in cases of families comprising a greater number, brothers and sisters being placed usually in the same home. The children are supervised by salaried inspectors, whose efforts are supplemented by honorary officers. Women inspectors visit infants placed apart from their mothers, and all such infants in the metropolitan area must be submitted to medical examination every fortnight during the first twelve months of life.

The children may be apprenticed with suitable employers under terms of indenture which prescribe a wage payment and pocket-money on a specified scale. The wages are banked to the credit of the apprentices and one-third of the accumulated amount is paid to them on completion of apprenticeship, the balance remaining at interest till age 21 is attained. The majority of the girls are apprenticed in domestic service, and the boys to farmers, orchardists, and artisans in country districts.

The children boarded out as State wards in December, 1936, consisted of 2,370 boys and 1,930 girls, of whom 129 boys and 129 girls had been adopted or boarded without subsidy, and 133 boys and 132 girls were apprenticed.

State wards awaiting placement with suitable guardians and those who for various reasons may not be boarded out or apprenticed are accommodated in homes maintained by the State. The number in these homes in December, 1936, was 243, of whom 127 were girls. There is a farm home at Berry where the older boys may be trained for rural work and arrangements are being made for a domestic science school for girls.

The foregoing figures regarding State wards do not include 607 delinquent children in State institutions for delinquents, or in shelters where they are accommodated temporarily pending transfer to an institution or release on probation.

*Delinquent Children.*

Cases of juvenile offenders under the age of 18 years are dealt with in the Children's Courts, by magistrates with special qualifications for the treatment of delinquent children.

Leniency is an outstanding feature in the treatment of the young offenders, and a large number are released after admonition, or on probation, committal to an institution being a final resort. The children brought before the courts are classified into distinct groups, according to the special treatment they require, consideration being given to the character of the child and the circumstances surrounding the committal of the offence, the home environment, the character of the parents, and the nature of their control. In the metropolis there are shelters for the temporary detention of boys and girls.

Children committed to institutions may be detained in custody until the expiration of the period specified by the Court, or until reaching the age of 18 years. They may be indentured as apprentices with suitable employers or restored to the custody of parents or guardians. The Child Welfare Department exercises control of delinquent children committed to State institutions and undertakes supervision of those released on probation by the Children's Courts.

The State institutions for delinquent boys are located at Mittagong, Gosford, and Yanco, and industrial schools for delinquent girls at Parramatta and La Perouse. The Riverina Welfare Farm at Yanco is the principal institution for training the boys in rural pursuits. Under certain conditions children may be committed to approved institutions established by the religious organisations.

At 31st December, 1936, there were 475 boys in the three institutions and 12 in the metropolitan shelter, and there were 115 girls at Parramatta and La Perouse, and 5 in the metropolitan shelter for girls. A hostel has been opened for former inmates of the girls' industrial schools to provide accommodation for them when out of employment.

*Relief of Children of Deserted Wives, etc.*

An important activity of the Child Welfare Department relates to the maintenance in their own homes of children whose mothers have been deprived of their husbands' support through desertion, illness, infirmity or imprisonment. Relief in this form is granted also in respect of ex-nuptial children. The rate of contribution since August, 1932, has been 8s. 6d. per child up to a maximum of £3 per week per family. Where old-age or invalid pension is received the limit is £3 10s., including pension. Relief is not payable by the Child Welfare Department for children whose mothers are qualified for widows' pensions, but assistance is given in respect of the children of widows who are not eligible for such pensions, such as those qualified to receive invalid pensions provided by the Commonwealth Government.

In 1936 contributions were paid by the Department to 5,150 mothers for the support of 10,032 children.

*Children in Foster Homes.*

The law regarding the reception of children in foster homes (other than State wards boarded out by the State) prescribes that such places must be licensed if one or more children under 7 years are received. No person, without a written order of a court, may receive

a child under 7 years of age to be maintained apart from its mother in consideration of the payment of money. The payments must be by periodical instalments, and the instalments may not be paid for more than four weeks in advance, nor exceed the sum of 30s. per week.

The number of foster homes registered in 1936 was 306, and the number of children 603. During the year 198 were discharged to their parents, 18 were transferred to the control of the Child Welfare Department, 1 died, 91 were removed from State supervision for other reasons, and 295 remained in the foster homes at the end of the year.

### *Children in Charitable Institutions.*

In addition to the State homes and other institutions for children administered by the Child Welfare Department, there are institutions conducted by religious bodies and other organisations where children are placed by their guardians in preference to being boarded out under the State system. Some of these receive children from the Children's Courts. Those in which children under the age of 7 years are received must be licensed as foster homes under the Child Welfare Act, as shown above. In a few cases the parents contribute towards the support of the children, but usually they are maintained by the organisations which conduct the establishments.

Some of the institutions provide temporary accommodation for children in need of medical care or holiday. Amongst these is the Stewart House Preventorium, at Curl Curl, for weak, ill-nourished children of the public schools. The Far West Children's Health Scheme maintains a seaside home at Manly for children of the western districts, and provides medical services for children in that sparsely settled area.

At the end of the year 1935 there were 5,221 children in these charitable institutions, and there were 834 in the State institutions, such as homes for delicate children, industrial schools, and shelters. Particulars of the children in the various kinds of institutions are shown below:—

Institutions.	Metropolitan.		Country.		Total.		
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Total.
Lying-in Homes ... ..	5	11	15	6	20	17	37
Benevolent Asylums ... ..	16	13	163	129	179	142	321
Orphan Asylums ... ..	373	485	784	759	1,157	1,244	2,401
Neglected and Delinquent Children's Homes—State ... ..	93	236	454	16	547	252	799
Other ... ..	355	484	54	48	409	532	941
Institutes for Deaf, Dumb, and Blind	93	95	51	41	144	136	280
Infants' Homes ... ..	118	65	62	46	180	111	291
Other Charitable Institutions ...	61	76	7	7	68	83	151
Total ... ..	1,114	1,465	1,590	1,052	2,704	2,517	5,221

### *Mentally-deficient Children.*

Experience obtained by the medical inspection of school children indicates that about 1 per cent. require special tuition on account of mental deficiency and efforts are being made to establish a comprehensive system for their treatment. A residential school for such children is maintained

by the State at Glenfield. Four cottages and a central administrative building have been erected on a plan which will allow the construction of four additional cottages if required. In each cottage accommodation is provided for 32 children. The site occupies 110 acres in a healthy locality, 4 miles from Liverpool, and the buildings are connected with the metropolitan water supply and electricity systems.

State wards who are mentally deficient are accommodated in two homes under the control of the Child Welfare Department. At each home there is a school with a special staff.

#### *Medical Inspection of School Children.*

A system of medical inspection of school children, under the control of the Principal Medical Officer of the Department of Education, is conducted by a staff consisting of 13 medical officers, 9 dentists, 13 nurses and 8 dental assistants.

It is the aim of the School Medical Service that every child be examined at least twice during the period of compulsory school attendance, *i.e.*, between the ages of 7 and 14 years. In the metropolitan area an annual visit of inspection is made to nearly every school for the examination of the children in the first-class and those whose thirteenth birthday occurs in the year. Outside the metropolitan area a triennial visit is paid to schools. Oculists visit schools in outlying districts, and carry out eye refractions, and prescribe glasses where necessary.

The following summary gives particulars of children medically examined during the years 1934 to 1936:—

		1934.	1935.	1936.
Number examined	.. .. .	44,107	47,430	51,083
Number reviewed	.. .. .	27,931	24,677	24,529
Percentage of those examined notified for defects (medical and dental)	.. .. .	36.0	35.6	37.6

School dental service is provided by nine dental clinics. In addition to general examinations dental treatment is provided for children aged 7 and 8 years in the metropolitan district and from 6 to 9 years in country schools, and emergency work is undertaken for children of all ages. The number of children treated during 1936 was 15,408, treatment being completed in 88 per cent. of the cases.

The work of the medical officers of the Department of Education includes the investigation of epidemics of infectious diseases affecting school children; the inspection of school buildings; courses of lectures at the Teachers' Colleges; lectures to pupils of high schools and to parents, and the medical examination of children brought before the Children's Courts and those under the care of the Child Welfare Department. Special investigations are carried out into problems affecting the welfare of children, such as goitre, crippling, mental deficiency, and stammering.

The expenditure on the school medical and dental services in 1936, exclusive of administration, was £20,516.

#### *Employment of Children.*

In other chapters of this volume particulars are shown regarding the employment of children in factories and as apprentices. There are two classes of employment in which children may not be employed unless licensed under the Child Welfare Act, *viz.*, in public theatrical performances and in street trading.

Theatre licenses may be issued in respect of children over 7 years, subject to such restrictions and conditions as the Minister may think fit. The licenses may be rescinded at any time upon sufficient cause being shown.

Street trading is defined as hawking, singing or performing for profit, or any like occupation conducted in a public place. Boys under 12 years and girls are not allowed to engage in street trading, and the boys under 16 years must be licensed, and are required to wear a metal arm-badge whilst trading.

Precautions are taken by supervisors to ensure the regular school attendance of licensees under 14 years of age. Boys between the ages of 12 and 14 may trade between the hours of 7 a.m. and 7 p.m.; and boys over 14 years of age, between 6 a.m. and 10 p.m.

Particulars relating to the licenses issued during the last five years are shown below :—

Year.	Theatre Licenses issued.	Street Trading Licenses Granted to Boys.		
		Under 14 years of age.	14 to 16 years of age.	Total.
1932	770	629	704	1,333
1933	777	508	533	1,041
1934	673	402	449	851
1935	440	573	390	963
1936	710	1,103	551	1,654

With few exceptions the street trading licenses were issued to newspaper vendors. The licenses are issued half-yearly, therefore the number issued each year is approximately double the number of boys licensed. The number of licenses current at the end of 1936 was 658, viz., 523 held by boys under 14 years and 135 by boys over 14 years.

#### CHARITABLE INSTITUTIONS AND SOCIETIES.

In addition to hospitals for the treatment of sickness or disease, there exist both in the metropolis and in the country other institutions, such as homes for the aged and for children. The State maintains four asylums, others are maintained partly by State aid and partly by private contributions, and a few are wholly dependent on private aid.

Three of the State asylums are for men and one is for women. After the introduction of the old-age pension system the character of the work of three of the institutions was changed considerably, so that they are used to a large extent for the treatment of chronic ailments. They contain special wards for persons suffering from cancer, tuberculosis, and venereal diseases, and a hospital for the treatment of infectious diseases has been erected in the grounds of the institution at Lidcombe.

The average number resident in the State asylums during the year 1936 was 3,242. The average cost per inmate was £43 18s.; receipts from various sources represented £11 12s. per inmate, so that the net cost to the State was £32 6s. In the hospitals attached to the three institutions 5,973 cases of illness were treated during 1936—males 4,574 and females 1,399—and at the end of the year 1,551 patients remained under treatment.

In 1935 there were 141 charitable institutions in New South Wales, and the total number of inmates under care during the year was 33,710, including 16,826 children. The discharges numbered 22,007, and the deaths 1,647. The number remaining at the end of the year was 10,056, viz., 3,320 men, 1,515 women, and 5,221 children. A classification of the institutions in which the children were resident is shown on page 233. The receipts of the

institutions amounted to £902,972, including the cost of State institutions and State aid to other establishments, £573,178, and the expenditure amounted to £919,041.

A number of societies are active in the matter of charitable relief, *e.g.*, casual aid for indigent persons, help for discharged prisoners, shipwreck relief, etc.; and in many suburbs and country towns benevolent societies have been formed for the relief of local distress. Collections for charitable purposes are subject to regulations in terms of the Charitable Collections Act of 1934, and charitable organisations are required to be registered.

In 1935 statistical returns were supplied by 209 societies, the receipts of which amounted to £327,308 and expenditure £311,131.

The aggregate receipts of the charitable institutions and societies amounted to £1,230,280 in 1935, and the expenditure to £1,230,172. These included particulars of the State charitable institutions (except hospitals), the Child Welfare Department, the baby health centres, and the Aborigines Protection Board.

The following is a comparative statement of the receipts and expenditure since 1911. The particulars do not embrace all "registered charities," but only those permanently engaged in charitable or benevolent work:—

Particulars.	Year ended 31st December—					
	1911.	1921.	1931.	1933.	1934.	1935.
Receipts—	£	£	£	£	£	£
State Aid ... ..	192,941	668,044	839,016	750,733	702,717	703,197
Subscriptions, Fees, etc.	78,786	229,547	319,731	335,213	385,881	386,190
Other ... ..	67,519	68,363	137,049	124,140	121,442	140,893
Total ...	339,246	965,954	1,295,796	1,210,086	1,210,040	1,230,280
Expenditure—						
Buildings and Repairs	21,063	41,771	41,611	35,059	52,598	70,358
Maintenance, outdoor relief, Salaries, Wages	293,460	871,475	1,202,709	1,140,035	1,092,648	1,095,141
Other ... ..	11,142	39,371	65,780	39,647	69,656	64,673
Total ...	325,665	952,617	1,310,100	1,214,741	1,214,902	1,230,172

Financial aid from the State represented 57.2 per cent. of the total receipts in 1935. It included moneys provided by the State in respect of the governmental activities mentioned in the paragraph above the table.

#### PROTECTION OF THE ABORIGINALS.

The protection of the aboriginal natives of New South Wales is the function of a Board consisting of the Commissioner of Police and other members, up to ten in number, appointed by the Governor.

A number of reserves has been set apart for aborigines in various localities, where dwellings have been erected, and assistance in the form of food and clothing is supplied when necessary.

Aboriginal children are required to attend school until the age of 14 years, and schools have been established for their exclusive use. The Board may assume control of the children and apprentice them, or place them in a training home. The Board controls a training home for girls at Cootamundra, and a home for boys at Kinchela, on the Macleay River. A home for young children is maintained at Bomaderry by the United Aborigines' Mission with assistance from the State.

Certain particulars of aborigines in the State are collected each year. The number recorded as at 30th June, 1936, included 869 full bloods and 9,777 half-castes, as well as a number of quadroons and octoroons. Of these 2,974, including 362 full bloods, were in regular employment; and 2,828 others, of whom 285 were full bloods, were living in supervised camps. The number of aborigines enumerated at the census of 1933 is shown in the chapter "Population" of this Year Book.

The expenditure by the Aborigines Protection Board during the year 1935-36, amounted to £58,726, including £43,940 for general maintenance, £5,556 for purchase of stores, £8,339 for educational purposes, and £891 for medical attention and other services. An amount of £1,461 was received as revenue from sales of products raised on the reserves. The net expenditure during the year was £57,265.

#### DISPOSAL OF THE DEAD BY CREMATION.

Until 1925 the only method of disposal of the dead was by burial, but a crematorium was established at Rookwood in May of that year. In 1937 there were four crematoria—three in the metropolitan district and one in Newcastle.

The provisions of the law dealing with cremation are contained in the Public Health Act.

The number of cremations during the last ten years is shown by the following table. The number in 1936 represented 11.4 per cent. of the total deaths in the State:—

Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1927 ... ..	154	116	270	1932 ... ..	623	467	1,090
1928 ... ..	236	164	400	1933 ... ..	858	599	1,457
1929 ... ..	341	212	553	1934 ... ..	1,087	846	1,933
1930 ... ..	408	294	702	1935 ... ..	1,368	1,049	2,417
1931 ... ..	507	366	873	1936 ... ..	1,579	1,192	2,771

#### PENSIONS.

In New South Wales pensions are provided for the aged, for the permanently invalided, for persons incapacitated during war service, for the dependants of deceased soldiers and sailors, and for widows with dependent children. Provision is made also for superannuation in most sections of the Government services, and for certain employees of local governing bodies. Several of the banking companies and other firms have made arrangements for the superannuation of employees.

#### *Old Age and Invalid Pensions.*

Old-age pensions are payable to women aged 60 years or over, and to men aged 65 years or over (or 60 years in the case of men permanently incapacitated). In order to qualify for a pension the claimant must have resided in Australia for a continuous period of twenty years, though absences amounting in the aggregate to one-tenth of the total period of residence do not involve disqualification.

Invalid pensions are payable to persons over the age of 16 years who have resided continuously for at least five years, and have become incapacitated or blind, in Australia, also to persons permanently incapacitated or blind by reason of congenital defect if they were brought to Australia before the age of 3 years or have resided in Australia continuously for twenty years.

Naturalised persons are eligible for pensions, but aliens, Asiatics (except those born in Australia and Indians born in British India), and aboriginal natives of Australia, Africa, the islands of the Pacific, and of New Zealand, are disqualified.

A pension is not payable to any person who is adequately maintained by relatives, *i.e.*, father, mother, husband, wife, or children, either severally or collectively, nor if the net value of his property, exclusive of his home, exceeds £400, nor if his income exceeds a prescribed limit, *viz.*, £81 18s. per annum since September, 1936.

The amount of pension at maximum rate is subject to reduction so that the pensioner's income, together with pension, will not exceed the limit stated in the following table. It is reduced also by £1 for every complete £10 of the pensioner's property (exclusive of his home) in excess of £50, or £25 where both husband and wife are pensioners. In assessing the pensioner's income certain items are not included, *viz.*:—the value of sustenance or food relief granted under laws relating to unemployment relief; wages received under emergency or intermittent relief work in lieu of sustenance or food relief; benefits from friendly societies, trade unions or provident societies; allowances under Miners' Accident Relief Act (N.S.W.); and gifts or allowances from husband, wife, father, mother or children.

Date.			Maximum Rate of Pension Per annum.	Limit of Income (including pension) Per annum.
			£ s.	£ s.
1901, August...	...	...	26 0	52 0
1916, October	...	...	32 10	58 10
1920, January	...	...	39 0	65 0
1923, September	...	...	45 10	78 0
1925, October	...	...	52 0	84 10
1931, July	...	...	45 10	78 0
1932, October	...	...	39 0 45 10	71 10
1933, October	...	...	45 10	78 0
1935, July	...	...	46 16	79 6
1936, September	...	...	49 8	81 18

In October, 1933, the maximum rate of pension was fixed at 17s. 6d. per week, and became subject to review in each year in accordance with the rise and fall in the cost of food and groceries as indicated by the retail price index numbers compiled by the Commonwealth Statistician for the six capital cities of Australia for the twelve months ending 31st March the maximum to be not less than 17s. 6d. nor more than £1 per week. Under this arrangement the maximum rate of pension was raised to 18s. as from 4th July, 1935. By another amendment of the law in September, 1936, current pensions were increased by 1s. a week, and the scale for adjusting the rates was liberalised so that the rate for a full pension may not fall below 18s. a week, and pensions generally will have greater purchasing power according to the index numbers.

In the case of a permanently blind person, pension may be paid at such a rate (not exceeding the maximum rate) as will make his income, plus that of his wife, together with the pension, equal to an amount not exceeding £222 6s. per annum.

If a pensioner is an inmate of a public benevolent asylum, or remains in a public hospital for over twenty-eight days, he receives an allowance of 5s. 6d. per week instead of a full pension. If the pensioner had applied for a pension before entering the institution, the Federal Government also

pays to the institution an allowance up to 13s. per week for his maintenance, but such allowance is not made in respect of a pensioner who was an inmate when he applied for a pension.

The following statement shows, in respect of old-age and invalid pensions, the applications received in New South Wales, the number of pensions current, and the average rate and total liability in recent years in comparison with similar information for 1911-12, the first year of Commonwealth control:—

Year ended 30th June.	New Claims.	Pensions current in New South Wales at 30th June.			Weekly Rate of Pension, as at 30th June.		Estimated Annual Liability, as at 30th June.	Estimated Annual Liability per head of Population, as at 30th June.
		Males.	Females.	Total.	Max.	Average.		
Old-age Pensions.								
					s. d.	s. d.	£	s. d.
1912	4,763	13,639	16,029	29,668	10 0	9 7	734,526	8 7
1921	5,727	16,033	23,004	39,037	15 0	14 1	1,428,253	13 7
1929	7,702	23,401	31,183	54,584	20 0	19 1	2,710,734	21 10
1931	12,814	28,003	37,029	65,032	20 0	19 1	3,225,872	25 3
1932	11,625	30,098	39,769	69,867	17 6	16 6	2,996,266	23 3
1933	7,884	30,551	38,256	68,807	17 6	15 8	2,804,958	21 7
1934	9,898	31,548	39,584	71,132	17 6	16 10	3,116,672	22 5
1935	10,615	32,890	41,762	74,652	17 6	16 10	3,260,712	24 8
1936	11,611	34,345	43,907	78,252	18 0	17 4	3,529,214	26 7
Invalid Pensions.								
					s. d.	s. d.	£	s. d.
1912	1,784	2,549	2,278	4,827	10 0	9 9	121,836	1 5
1921	3,278	7,016	8,371	15,387	15 0	14 9	588,588	5 7
1929	4,652	10,486	13,489	23,966	20 0	19 7	1,220,908	9 10
1931	6,383	12,148	15,948	28,096	20 0	19 6	1,425,996	11 2
1932	6,025	13,025	16,930	29,955	17 6	17 0	1,326,988	10 3
1933	5,066	13,474	17,255	30,729	17 6	16 6	1,315,236	10 1
1934	6,322	14,616	18,735	33,351	17 6	17 0	1,473,940	11 3
1935	7,138	15,362	20,160	35,522	17 6	16 11	1,562,704	11 5
1936	7,317	16,074	21,523	37,597	18 0	17 5	1,702,402	12 10

At 30th June, 1936, the number of pensioners in public benevolent asylums in New South Wales was 1,421, and the annual liability for their pensions at the rate of 5s. or less per week was £18,473.

The old-age and the invalid pensioners in New South Wales as at 30th June, 1936, represented respectively 29.2 and 14.1 per 1,000 of population, as compared with 30.5 per 1,000 and 11.9 per 1,000 in the Commonwealth. The number and proportion of pensioners have varied appreciably with each increase or decrease in the maximum rate and in the value of property which a pensioner may hold without disqualification.

The total expenditure by the Commonwealth on invalid and old-age pensions during the year ended 30th June, 1936, was £12,797,726, of which £12,634,706 were paid as pensions, including payments to pensioners in benevolent asylums and hospitals, and £163,020 to public benevolent asylums and hospitals for the maintenance of pensioners. In addition the cost of administration was approximately £115,257.

The amount of pensions, etc., paid in New South Wales during 1935-36 was £5,132,722, including £44,260 to asylums and hospitals.

#### Widows' Pensions.

Pensions are payable to widows in terms of the Widows' Pensions Act, 1925-1932. A widow is not qualified to receive a pension unless she was domiciled in New South Wales at the date of her husband's death, is residing in the State at the date of her application for a pension, and has been so residing continuously for a period of three years, and (except in cases noted below) has wholly or mainly dependent upon her for support a child.

stepchild, or child legally adopted before her widowhood, who is under the age of 14 years. If a child is suffering from mental or physical disability or possesses special scholastic ability the age limit is 16 years.

A widow without dependent child may be granted a pension if she is at least 50 years of age and in destitute circumstances, or if on the death of her husband she is left unprovided for—the pension in the latter case being limited to the period of six months after the death of her husband.

A pension may not be paid to any widow if she is receiving any other pension or allowance exceeding the amount of pension which, if otherwise qualified, she would receive under this Act; nor if she or her children, individually or collectively, own property exceeding £1,000 in value—apart from their dwelling, furniture and other personal effects.

The rate of pension is 17s. 6d. per week for the widow and 8s. 9d. for each child eligible for pension, less £1 per annum for each £1 of the widow's income in excess of £39 per annum. In assessing the widow's income it is deemed to include any pension or allowance under any other Act; the earnings of the widow or her children under 14 years of age from personal effort; 5 per cent. of any real or personal property of the widow or her children which produces less than 5 per cent. per annum, except the house in which they reside and the furniture and personal effects therein; and any payment for the children's maintenance or education from any estate, etc.

The widow's income is deemed to include also 50 per cent. of the earnings of unmarried children over 14 years of age residing with her, and 25 per cent. of the earnings of unmarried children not residing with her. In special circumstances, however, the whole or part of such earnings may be disregarded. Her income is not deemed to include sick allowance or funeral benefit from any society, nor money received under an insurance policy on the destruction or damage of property.

Pensions are not payable for any period while the pensioner resides out of New South Wales, except during occasional absences during which her family or home is in the State. Pensions are terminated on the marriage of a pensioner or on the date she becomes qualified to receive an old-age or invalid pension under federal legislation. On the death of a widow the guardian of her children is entitled, with the Minister's approval, to receive the pension payable in respect of them.

The number of pensions granted and the amount of pensions paid during each of the last six years are shown below:—

Year.	Pensions Granted.	Pensions Paid.	
		Amount.	Per Head of Population.
	No.	£	s. d.
1930-31	6,661	620,258	4 9
1931-32	7,218	638,970	5 0
1932-33	7,180*	618,685	4 9
1933-34	8,433	529,764	4 1
1934-35	8,268	532,416	4 1
1935-36	8,168	558,431	4 2

\* Estimated.

The number of original claims granted during 1935-36 was 1,482, the total number of pensions, including renewals, granted was 8,168, and the average amount authorised was £73 1s. 8d. per annum. The pensions are subject to review from time to time throughout each year, and may be varied in amount or suspended or cancelled in cases where the widow's circumstances have changed since issue or previous review.

The decline in the annual cost of pensions since 1931-32 has been due largely to a reduction in the maximum rates in February, 1933, viz., from £1 per week for the widow and 10s. for each child to 17s. 6d. and 8s. 9d., respectively. The annual payments are affected by variations in the number of fortnightly pay-days, viz., 27 in the years ended June, 1933 and 1936, 25 in 1933-34 and 26 in the other years.

#### *War Pensions.*

War pensions are granted by the Commonwealth Government upon the death or incapacity, as the result of war service, of members of the naval or military forces.

The number of war pensioners as at 30th June, 1936, was as follows:—

War Pensioners.	New South Wales.		Commonwealth.	
	Number of Pensioners.	Average Fortnightly Rate.	Number of Pensioners.	Average Fortnightly Rate.
Incapacitated Soldiers ... ..	25,644	£ s. d. 2 1 2	76,337	£ s. d. 1 18 11
Dependants of Deceased Soldiers ...	9,419	2 7 6	30,062	2 6 6
Dependants of Incapacitated Soldiers ...	49,239	0 9 5	153,736	0 8 10
Total .. ..	84,302	1 3 4	260,135	1 2 0

At 30th June, 1936, there were 84,302 war pensions current in New South Wales, and the annual liability was estimated to be £2,555,340.

In addition to war pensions, a system of service pensions was introduced in January, 1936, and for ex-service men aged 60 years or over, or permanently unemployable by reason of physical or mental incapacity, or suffering from pulmonary tuberculosis. Claimants for these pensions are not required, as in the case of war pensions, to establish the fact that their disability arises from war service. There were 1,313 service pensions current in New South Wales at 30th June, 1936, viz., 777 to members of the forces and 536 to dependants, the average fortnightly rates being 28s. 3d. and 14s. 3d. respectively. The total number in the Commonwealth was 3,848.

The amounts paid in New South Wales during 1935-36 were war pensions £2,592,985 and service pensions (half-year only) £10,450, the corresponding amounts paid in the Commonwealth being £7,520,228 and £31,135 respectively.

#### *Government Service Pensions.*

The existing pension funds for employees of the State Government of New South Wales are the State Superannuation Fund, the Police Superannuation and Reward Fund, and the Government Railways Superannuation Fund. There is also a fund for the superannuation of employees of the Commonwealth Government. These funds are maintained partly by deductions from officers' salaries and partly by grants from the public revenue.

Special provision is made by the State Government for pensions to judges, the amount paid from Consolidated Revenue during the year ended 30th June, 1936, being £9,759.

The first Public Service Superannuation Fund in New South Wales was established by the Civil Service Act, 1884. In 1895 the admission of new contributors was discontinued, and current pensions under the scheme are paid from Consolidated Revenue, as shown later.

The existing Superannuation Fund was constituted by provisions of the Superannuation Act, 1916, and amendments. It provides a scheme of pensions for permanent employees of the State Government and statutory bodies—exceptions being those covered by the police and the railway service schemes.

Originally the scheme was based upon the principle of a fund formed by regular compulsory contributions, in equal proportions by the State Government and statutory bodies, as employers, and the permanent officers of the services, so that the moneys accumulated during service would be available to pay the pensions on maturity. Concessions were allowed to officers who were over 30 years of age when the scheme was brought into operation, and the State Treasury made an agreement with the Superannuation Board that the cost of these concessions would be paid from Consolidated Revenue in instalments spread over a number of years. Subsequently the scheme was amended so that the Crown contributions to the Superannuation Fund are made as the pensions become due and not during the service of the employee concerned, and contributions already paid by the Crown in respect of unmatured pensions are being repaid to the Treasury by the Superannuation Fund. The amount, £3,832,000, with interest, is being repaid in fifteen annual instalments of £328,728.

The alteration in the method of payment by employers does not apply to contributions by some of the statutory bodies which continue to be paid as under the original Act, *e.g.*, the Rural Bank, the Metropolitan and Hunter District Water Supply and Sewerage Boards, the Fire Commissioners, and the Commonwealth Savings Bank (in respect of former employees of the Government Savings Bank of New South Wales).

Contributions by employees are compulsory at rates which vary with the age and sex of the contributor. Pension is payable and contributions cease at age 60 years, unless the officer's service is terminated sooner, and women may elect to contribute for retirement at age 55 years. The average annual contributions at 30th June, 1936, were men £18 2s., and women retirement at age 55 years £11 2s. or retirement at age 60 years £7 2s. The amount of pension ranges from £52 to £312 according to salary. Upon the death of a contributor or a pensioner his widow receives one-half of the amount of his pension and £13 per annum for each child under 16 years of age. Contributions paid by unmarried contributors or widowers who died before retirement are refunded to personal representatives.

The income and expenditure of the Superannuation Fund in the years 1928-29 and the last four years, also the funds at the end of these years are shown below:—

Particulars.	1928-29.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
Contributions—Employees ... ..	301,838	322,878	315,958	311,745	318,802
Employers ... ..	464,251*	271,835	241,595	303,295	322,464
Interest on Investments ... ..	393,229	448,873	464,612	466,859	472,730
Miscellaneous ... ..	...	...	...	32	6,822
Total Income ... ..	1,159,318	1,043,586	1,062,165	1,081,931	1,120,818
Pensions ... ..	158,065	275,779	301,273	327,559	353,878
Refunds of Contributions ... ..	30,070	35,379	32,354	67,415	51,377
Refunds on Retirement ... ..	370	34,044	6,368	10,264	12,821
Administrative Expenses ... ..	11,388	10,930	9,357	9,618	10,220
Interest paid to State Treasury ... ..	...	57	134,465	124,822	116,645
Miscellaneous ... ..	...	...	128	92	204
Total Expenditure ... ..	201,693	356,189	483,942	539,770	545,145
Accumulated Funds at end of year ... ..	10,895,923	10,458,486	6,900,213	7,429,969	8,550,787

\* Exclusive of £102,332 not received.

The amount of accumulated funds was reduced in 1929-30 and in 1933-34 as a result of amendments in the law respecting employers' contributions, as noted above. The liabilities at 30th June, 1936, amounted to £11,285,777, including accumulated funds and a sum of £3,217,358 in respect of employers' contributions which are being repaid to the State Treasury. The investments at the date amounted to £10,927,803, viz., Commonwealth Government securities £6,687,391; securities guaranteed by the Government of New South Wales, £888,950; and securities of local governing bodies, £3,161,305.

The number of contributors to the Superannuation Fund at 30th June, 1936, was 21,359, consisting of 14,421 men and 4,459 women contributing for retirement at age 60 and 2,479 women contributing for retirement at age 55 years. The number of contributory pensions in force was 4,279, viz., 1,975 to men, average rate £115 9s. per annum; 774 to women, average £89 17s.; 1,179 to widows, average £61 6s.; and 351 to children at the rate of £13 per annum. The annual amount was £374,450. There were in addition 1,124 non-contributory pensions for an amount of £72,814 payable from Consolidated Revenue or the funds of corporate bodies being pensions in respect of officers who were over the age of 60 years when the provisions of the Superannuation Act were brought into operation. These consisted of 470 pensions payable to men at an average rate of £86 10s. per annum; 83 to women, average £81 12s.; 568 to widows, average £44 12s.; and 3 at £13 per annum to children.

Particulars of pensions payable under the Civil Service Act and the Superannuation Act as at 30th June, 1936, are shown below. Some of those payable under the latter Act were in abeyance as the officers had not retired:—

Particulars.	Pensioners.					Amount of Pensions per annum.
	Men.	Women.	Widows.	Children.	Total.	
Superannuation Act—						£
Contributory pensions from Superannuation Fund ... ..	1,975	774	1,179	351	4,279	374,450
Non-contributory pensions—Consolidated Revenue and funds of corporate bodies ... ..	470	83	568	3	1,124	72,814
Civil Service Act—From Consolidated Revenue ... ..	553*		15	...	568	156,144*
Total ... ..	3,855		1,762	354	5,971	603,408

\* Includes pensions to 124 officers transferred to Commonwealth Service, for which the Commonwealth pays proportion amounting to £23,558.

Pensions for the police are paid from the Police Superannuation and Reward Fund to which the police contribute at the rate of 4 per cent. of salary. Other sources of revenue are penalties imposed on members of the police force, penalties and damages awarded to the police as prosecutors, and the proceeds of the sale of unclaimed goods, but approximately 75 per cent. of the annual receipts are appropriated from Consolidated Revenue. The amount of pension payable to members of the police force is graduated in accordance with length of service and the rate of salary at date of retirement. The retiring age is 60 years, except in cases of incapacitation, but the services of any member of the force may be retained until he reaches the age of 65 years. If members of the force die whilst in the service, gratuities may be paid to or on behalf of dependants. During the year

ended 30th June, 1936, the receipts of the Police Superannuation and Reward Fund amounted to £316,660, including deductions from salaries; £49,199, and appropriation from Consolidated Revenue, £230,700. The disbursements, £316,650, included pensions, £287,013, and gratuities £29,395. The number of pensions was 858, including 25 to widows and children.

The Government Railways Superannuation Fund was established in October, 1910, for employees in the State railway and tramway services. The contributions from employees are at the rate of  $1\frac{1}{2}$  per cent. of wages or salary, and the railway and tramway funds provide all that is necessary beyond such contributions. The amount of pension payable is one-sixtieth of the average annual salary during term of service, multiplied by the number of years of service, the maximum pension being two-thirds of the average salary. The number of contributors at 30th June, 1936, was 45,385. Superannuation allowances in force numbered 5,407, and the aggregate annual amount was £504,625, representing an average of £93 6s. per annum. Disbursements during the year 1935-36 amounted to £562,611, and the total receipts to £560,989. Deductions from salaries provided £162,921 and contributions from the railways fund amounted to £311,300 and from the transport (tramways) fund to £80,788. Up to 30th June, 1936, the total subsidy from the public revenues was £2,394,485, of which £402,650 had been provided from Consolidated Revenue, £1,706,889 from the Government Railways Fund, and £284,946 from the transport (tramways) fund. Since the inception of the fund 9,426 superannuation allowances have been granted, 3,727 retired officers have died, 267 have been reinstated and 25 allowances have been written off the books.

In the Superannuation Fund for the Commonwealth Public Service as at 30th June, 1934, there were 30,389 contributors, of whom approximately one-third were in the State of New South Wales.

#### *Superannuation—Local Government Services.*

A superannuation scheme for permanent employees of municipalities and shires was brought into operation in April, 1928, in terms of the Local Government (Superannuation) Act, 1927. It provides for compulsory endowment insurance with approved societies. The policies mature at age 65 or previous death and the premiums are payable by the councils and the employees at prescribed rates. There is also a provident fund formed by contributions by councils and employees for those who are debarred from insurance on account of age or other circumstances. The scale of compulsory cover ranges from £200 to £1,000 according to age and salary. The insurance cover intact at 30th June, 1936, in respect of 2,464 employees was £1,644,626 including bonuses £144,426, and 328 employees were contributors to the Provident Fund.

#### FAMILY ALLOWANCES.

The introduction of family allowances in New South Wales in July, 1927, was an outcome of the system of wage regulation which is described in the chapter relating to wages. Nevertheless, endowment is not restricted to the children of wage and salary earners, but is payable under like conditions for the children of other families whose income does not exceed a prescribed limit. This limit is based on the living wage determined from time to time by the Industrial Commission of New South Wales, which covers the requirements of a family unit in which there is one child under 14 years, and one child in each family has been excluded from the endowment system since December, 1929.

The allowances are payable until the children reach the age of 14 years, and may be continued to 16 years if the child is incapacitated. Children

in charitable institutions are included within the scope of the system. Illegitimate children are excluded generally, but the Commissioner of Family Endowment has discretionary power to pay endowment in respect of such children under special circumstances. Others excluded are children of fathers who are aliens, Asiatics, or aboriginal natives of Africa, the Pacific Islands, or New Zealand, unless born in Australia; children for whom pension is payable under the Widows' Pensions Act or any other State or Federal Act except war pensions; children for whom family allowance is paid in the Commonwealth Public Service.

Where practicable, the endowment is paid to the mothers, and for mothers and children, except those under 2 years of age who were born in the State, there is a residence qualification of two years in New South Wales immediately preceding the date of claim.

The maximum rate of endowment is 5s. per week per endowable child, but the amount at this rate is reduced where necessary to comply with a condition that endowment may not raise the family income above the living wage, plus £13 for each dependent child except one. The living wage was declared by the Industrial Commissioner at 69s. per week in April, 1936, at 70s. in October, 1936, and 71s. 6d. in April, 1937. As a general rule claims are granted for the period of one year according to the family income during the twelve months preceding claim.

The family income is defined as the combined income of the claimant, her spouse, and children under 14 years, including weekly payments of workers' compensation, and 5 per cent. per annum of the value of real or personal property (except their residence, and the furniture and personal effects therein), which produces less than 5 per cent. per annum. In assessing the income the following amounts are excluded, *viz.*, sick pay and funeral benefits from any society; money received under fire insurance policy; lump sum payments as workers' compensation or super-annuation or gratuity; earnings of children under 14 years; earnings of mother from casual employment; war pensions; earnings from overtime up to £26; payments by the State in respect of a child's attendance at school; and where income is derived otherwise than from wages, the amount expended in the production of that income.

Until 31st December, 1933, moneys for endowment were obtained from proceeds of taxation levied upon employers on the basis of amounts paid in salaries, wages, etc. The tax was abolished as from 1st January, 1934, and endowment has since been paid from the general revenue of the State.

Particulars relating to claims for endowment granted and the amount of endowment paid during the last six years are shown below. The number of claims as stated is exclusive of claims by charitable institutions and of claims for additional endowment on account of children born in families already receiving allowances.

Year.	Number of Claims granted.				Amount of Endowment Paid.	
	For period of one year.			Other Claims.	Total.	Per head of Population.
	Original.	Renewals.	Total.			
					£	s. d.
1930-31 ... ..	14,955	39,045	54,000	12,320*	1,196,484	10 5
1931-32 ... ..	16,014	53,957	69,971	4,114*	1,805,685	14 1
1932-33 ... ..	9,229	60,342	69,571	914	2,105,659	16 3
1933-34 ... ..	7,038	64,687	71,725	324	1,960,972	15 0
1934-35 ... ..	5,747	62,111	67,858	204	1,898,315	14 5
1935-36 ... ..	5,387	55,949	61,336	274	1,804,392	13 7

\* Quarterly periods in most cases.

Though it is a general rule to grant endowment for a period of twelve months, a large number of claims in 1930-31 were granted for shorter terms under the provisions of an amending Act passed in December, 1929, which prescribes that claims for endowment of wage-earners' families, except those following occupations of a seasonal character, may be granted for one, two, three or four quarters on the basis of the average income for a similar period before the date of claim. The practice of granting endowment for short terms was abandoned later, on account of the expense entailed by the frequent review of the claims.

The living wage, which is the basis of the income limit, remained at predepression level until it was reduced from 82s. 6d. to 70s. per week in August, 1932, and the cost of endowment rose rapidly under the influence of depression during 1930-31 and 1931-32. The reduced wage came gradually into effect as a measure of family income during the twelve months after it was determined, but it was offset by increased unemployment. The allowances are paid fortnightly, so that there are usually 26 pay days per annum, but there were 27 in 1932-33 and 1935-36 and 25 in 1933-34. On account of this variation the fortnightly averages in each year, rather than the annual payments, reflect the rise and fall in endowment. The average amount paid per fortnight in the years ended 30th June, 1933 and 1934, was approximately £78,000. It declined to £73,000 in 1934-35 and to £66,800 in 1935-36.

The following summary relates to particulars furnished by claimants for endowment in regard to average endowment and to family income and unemployment during the twelve months preceding the date of claim.

Year ended June.	Average per claim granted during the year.				
	Number of Endowable Children.*	Endowment Authorised per annum.	Family Income per annum.	Period of Unemployment (Principal Breadwinner).	
				Average over all Claims.	Average excluding claims which showed no unemployment.
		£ s.	£ s.	Weeks.	Weeks.
1931 ...	2.40	27 10	122 0	19.8	26.9
1932 ...	2.30	28 11	87 2	28.5	34.8
1933 ...	2.23	27 13	84 13	28.1	35.5
1934 ...	2.23	27 0	91 19	23.4	32.2
1935 ...	2.25	26 13	105 12	19.8	28.1
1936 ...	2.26	26 9	114 15	16.6	24.9

\* Dependent children, except one, in each family.

-- The living wage was constant at 82s. 6d. per week from December, 1929, to August, 1932, yet the average income of the families to whom endowment was granted during 1930-31, and 1931-32, declined from £122 to £87. The increase from £84 to £105 in later years, when the reductions in the wage would have excluded the higher income groups eligible in the earlier years, indicates a substantial improvement in family circumstances. Further evidence of this is supplied inversely in the trend of unemployment amongst the principal bread-winners. Unemployment from other causes as well as scarcity of work, such as illness, industrial strife, etc., has been taken into account, and heads of families whose employment during the twelve months preceding claim consisted of less than six weeks' unemployment relief work have been counted as unemployed over the whole year.

Officers of the Public Service of the Commonwealth, of whom a large number are employed in New South Wales, have, in terms of their employment, received child endowment since November, 1920. The payments are at the rate of 5s. per week for each dependent child under the age of 14 years, provided that it does not bring the remuneration of the officer above £500 per annum. In effect the cost is borne by the employees in the service, because in assessing the basic wage upon which he determines their salaries and wages, the Public Service Arbitrator deducts from the rate, which otherwise would be awarded, a sum to cover the cost of endowment.

Employees of banks in New South Wales also receive child endowment in terms of an award for bank officers made originally by the Industrial Commission of New South Wales in June, 1927. The banks are required to pay allowances to officers covered by the award, at the rate of £29 per annum for each child under the age of 14 years, or, if at school, under the age of 16 years, provided that the amount of these allowances, together with salary, apart from other allowances, does not exceed £750 per annum. This provision of the award has been modified in the case of some of the institutions by agreement between the parties.

#### THRIFT.

Evidence that thrift is practised extensively in New South Wales is found in the strong position of friendly societies—both in membership and finances; in the large number of savings bank accounts and of life assurances; and in the growth of Starr-Bowkett building societies and co-operative trading societies. For particulars of the savings banks, and other financial institutions, reference should be made to the chapter of this volume relating to private finance.

#### FRIENDLY SOCIETIES.

Friendly societies exercise a strong influence for good in the community by inculcating habits of thrift, and by preventing and relieving distress.

The benefits assured by the societies consist usually of medical attendance and medicine for a member and his family, with sick pay for the member, and funeral allowances for the member and his wife. The sickness benefit in the largest societies is 21s. per week during the first six months of illness. Then the rate of benefit is reduced at six-monthly intervals, so that it is 15s. for the second period of six months, 5s. or 10s. for the third period, 5s. for the fourth period, and a rate of 2s. 6d. per week is paid during the remainder of illness, that is, after the first two years.

The funeral benefits range usually from £10 to £40 at death of the member, according to the period of membership, and a contingent benefit of £10 or £15 is payable on death of his wife. In several societies members may assure for sums up to £100, and in two of them it is possible to assure for £200, the maximum allowed by law. A separate benefit for widows of members—usually £10—may be assured in most of the societies for a stated contribution.

The societies may be divided into two classes, viz., friendly societies proper, and miscellaneous societies, which are within the scope of friendly societies legislation, though their benefits differ somewhat from those of ordinary friendly societies.

At 30th June, 1936, there were 51 societies, including 21 miscellaneous; 17 possessed branches and 13, including one with a juvenile branch, were classed as single societies.

The following summary shows the branches, membership, and funds of the societies as at 30th June, 1936. The miscellaneous societies had 68,778

members, but these are included in the membership of the friendly societies proper and they are not shown in the table.

Classification.	Societies.	Branches.	Members.	Funds.
Friendly Societies Proper—	No.	No.	No.	£
Affiliated ... ..	17	2,427	204,852	4,435,574
Single ... ..	13	1	1,995	50,929
	30	2,428	206,857	4,486,503
Miscellaneous Societies ... ..	21	.....	*	94,882
Total ... ..	51	2,428	206,857	4,581,385

\* Included in membership of the friendly societies.

In 1899, when the societies were first subjected to supervision by the Registrar, there were 78,245 members, equal to 5.9 per cent. of the population. Thereafter there was continuous progress until the outbreak of war, when the number declined owing to enlistments, and, subsequently, through deaths on active service. After the termination of the war there was an increase in each year until 1930-31, then followed a decline which persisted up to 1935, but some recovery was shown in 1936.

The membership at intervals since 1899 is shown in the following table:—

At 30th June.	Aggregate Membership.		At 30th June.	Aggregate Membership.	
	Members.	Percentage of Population.		Members.	Percentage of Population.
1899*	78,245	5.9	1931	242,344	9.5
1901*	89,684	6.5	1932	225,331	8.7
1911*	164,910	9.7	1933	211,567	8.2
1921	199,688	9.5	1934	205,053	7.8
1929	247,730	9.9	1935	204,626	7.7
			1936	206,857	7.8

\* At 31st December.

During 1934-35 the number of members entitled to benefits increased for the first time during the last five years, and the upward trend continued during 1935-36, when the number increased from 189,600 to 193,188. The benefits of medical attendance and medicine accrue also to the member's family, but such persons are not included in the membership.

The membership at 30th June, 1936, consisted of 169,088 men, 16,831 women, and 20,938 juveniles. As compared with the membership at 30th June, 1929, there were decreases of 34,670 men, 4,112 women, and 2,091 juveniles; the total decrease being 40,873. The number of juveniles increased by 894 in 1935-36 and the number of adults decreased by 1,403.

Particulars of the membership in June of each year since 1929 are shown below.

At 30th June.	Membership.				Members eligible for Benefits.	
	Men.	Women.	Juveniles.	Total.	Number.	Proportion of Total.
						per cent.
1929 ... ..	203,758	20,943	23,029	247,730	228,125	92.1
1930 ... ..	205,063	22,443	24,580	252,086	226,133	89.7
1931 ... ..	196,228	21,686	24,430	242,344	209,467	86.4
1932 ... ..	183,288	20,057	21,986	225,331	195,582	86.8
1933 ... ..	172,880	18,365	20,322	211,567	188,865	89.3
1934 ... ..	168,033	17,326	19,694	205,053	186,735	91.1
1935 ... ..	167,685	16,897	20,044	204,626	189,600	92.7
1936 ... ..	169,088	16,831	20,938	206,857	193,188	93.4

Information regarding receipts and expenditure of Friendly Societies, and the accumulated assets, may be found upon reference to the chapter of this Year Book entitled Private Finance.

*Miscellaneous Friendly Societies.*

In addition to the friendly societies proper there were at 30th June, 1936, twenty-one miscellaneous societies registered under the Friendly Societies Act. These organisations are medical institutions or dispensaries for the supply of medicine to those members of contributing branches of the ordinary friendly societies whose names have been placed on their lists. In some cases the miscellaneous societies arrange for medical attendance for such members.

The receipts of the miscellaneous societies during the twelve months ended 30th June, 1936, were £64,486 and the expenditure £58,774, so that there was an excess of receipts amounting to £5,712. Many of these bodies have received liberal grants from the Government, and with this assistance have purchased land and erected buildings. In some cases funds were raised by the issue of interest-bearing debentures to component societies. In addition to paying interest, most of the dispensaries or medical institutes have made substantial reductions in the principal. The funds amounted to £94,882 at 30th June, 1936.

*State Subvention to Friendly Societies.*

In terms of an Act passed in 1908 the State commenced to pay an annual subvention to the friendly societies for the purpose of enabling them to pay sickness benefits for extended periods, and to relieve aged members of the necessity of paying contributions.

The annual amount of subvention under arrangements described in earlier issues of this Year Book increased steadily until the payments in respect of the year 1929-30 reached the sum of £77,433. Then the Government decided, in view of adverse financial conditions, to limit the subvention to a fixed sum—£50,000—per annum, and the law was amended to provide for its distribution amongst the societies on the basis of aged membership. Subsequently this arrangement was altered and in terms of the Friendly Societies (Amendment) Act, 1932, provision was made for the payment of subvention in respect of the years ended June, 1931, and 1932, on the same basis as for earlier years, less a deduction of 20 per cent. Then a new scheme was brought into operation.

Subvention on the new basis is payable only in respect of persons who were members at 30th June, 1932. The amount which may be claimed in each year is a sum equal to the amount of contributions for sickness, funeral and medical benefits in respect of men over 65 years of age and women over 60 years as follows:—(a) those who were members at 30th June, 1932, and at the date of application for subvention had been members for a continuous period of 15 years; and (b) widows or widowed mothers of deceased members who were members at 30th June, 1932, and who had been members for 15 years continuously; (c) widows and widowed mothers in respect of whom subvention was being paid at 30th June, 1932. A proportion of each year's subvention in respect of medical benefits is advanced to the societies at quarterly intervals pending determination of the annual claims.

Payments to the societies in respect of subvention claims for the year 1934-35 amounted to £61,394, and for the following year to £64,633. The total amount paid by the State in respect of claims to 30th June, 1936, was £1,215,467.

## COMMUNITY ADVANCEMENT AND SETTLEMENT SOCIETIES.

The Co-operation Act, 1923-36, provides, *inter alia*, for the formation of community advancement societies and community settlement societies. Community advancement societies may be formed to provide any community service or benefit, *e.g.*, to transport and supply water, gas, and electricity, to establish factories and workshops, to undertake farming operations and the purchase of machinery for its members, to erect dwellings, to maintain buildings, etc., for education, recreation, or other community purpose, to promote charitable undertakings, and to do anything calculated to improve the conditions of urban or rural life in relation to the objects specified.

Community settlement societies may be formed for the purpose of acquiring land in order to settle or retain people thereon, and of providing any community service, and with these objects they may do anything calculated to promote the economic interests of their members.

Up to 30th June, 1936, twenty-nine community advancement societies had been registered under the Act, and there were twenty-four societies on the register at that date. Most of these societies were formed for the object of erecting and maintaining public halls or for establishing recreation or social clubs. Six community settlement societies have been registered, and there were two on the register at 30th June, 1936.

## HOUSING.

A classification of the occupied dwellings in New South Wales in 1921 and 1933, as disclosed by the census, is shown in the following statement. A room or a suite of rooms occupied as a flat or tenement is classified as a separate dwelling:—

Nature of Dwelling.	Number of Occupied Dwellings.					Per cent. of Total.	
	Census, 1921.	Census, 1933.				1921.	1933.
		Municipalities.		Shires.	Total, New South Wales.		
		Metropolis.	Country.				
Private House ... ..	396,619	244,167	119,314	180,369	543,850	91·60	90·70
Flat or Tenement in Private House	17,849	35,896	4,372	1,332	41,600	4·12	6·94
Caretaker's Quarters in Store, Office, etc. ... ..	627	552	167	149	868	·14	·14
Hotel ... ..	2,040	598	814	692	2,104	·61	·35
Boarding House, Lodging House, Coffee Palace ... ..	12,538	6,177	1,648	816	8,641	2·90	1·44
Educational Institution ... ..	463	211	168	167	546	·11	·09
Religious Institution (non educational) ... ..	89	23	7	12	42	·02	·01
Hospital ... ..	735	293	327	206	826	·17	·14
Charitable Institution (other than Hospital) ... ..	99	86	29	39	154	·02	·02
Penal Establishment ... ..	39	2	11	6	19	·01	·00
Military or Naval Establishment	31	11	10	3	24	·01	·01
Police Station or Barracks	560	42	154	334	530	·13	·09
Fire Station ... ..	109	49	56	12	117	·03	·02
Other (includes Club) ... ..	578	{ 100	92	120	312	·13	{ ...
Not Stated ... ..							
Total, Occupied Dwellings, No.	432,976	288,240	127,190	184,320	599,750	100·00	100·00
„ Per square mile ... ..	1·40	1,181·41	58·33	0·60	1·94	...	...
Wagon, Van, etc. (includes campers out) ... ..	1,886	67	957	2,693	3,717	...	...

The number of unoccupied dwellings was 18,619 in 1921, and 28,737 in 1933, and those recorded as being built 2,724 and 746 at the respective dates.

Private houses preponderate, representing nearly 91 per cent. of the occupied dwellings, but the outstanding feature revealed by the table is the marked increase in flats and tenements, particularly in the metropolitan area. Flats, as such, were hardly known in 1911, but in that year there

were 1,794 dwellings classified as tenements in private houses in Sydney and suburbs. Flats and tenements in the metropolitan area numbered 12,760, or 7.4 per cent. of the private dwellings in the metropolis in 1921, and increased to 35,896, or 12.5 per cent., in 1933. Though dear rents and building costs were in part the original stimulus to flat building, the movement is attributable also to an increased popularity of that type of dwelling.

In contrast with the expansion in the number of flats is the decrease in boarding-houses from 12,538, or 2.9 per cent., in 1921 to 8,641, or 1.4 per cent., in 1933. Hotels also show a large decline, due mainly to the operations of the Licenses Reduction Board, described later in this chapter.

Inmates of private houses, flats and tenements numbered 2,426,295 in 1933, or 93.3 per cent. of the total population. Of these 118,209 were housed in flats and tenements, and there were 117,877 persons sleeping on verandahs or in sleep-outs which were not permanently enclosed. Inmates of private dwellings numbered 1,491,504 in 1911 and 1,872,456 in 1921, or 91.2 per cent., and 89.6 per cent. of the population in those years respectively. The average number of inmates per private dwelling was 4.14 in 1933 compared with 4.52 in 1921, and between 1921 and 1923 the average number of inmates per room declined from 0.91 to 0.84. It is of interest to note the close correspondence between these figures and those for England and Wales, where the average number of persons per room declined from 0.91 to 0.83 between 1921 and 1931.

In 1933 there was an average of 4.24 inmates per private house, compared with 4.56 in 1921. The average number of inmates in flats and tenements was 2.84 in 1933 and 3.69 in 1921. An important factor affecting changes in the ratio of inmates to dwellings is the decline in the birthrate.

A classification according to the number of rooms shows that in 1933 there was an average of 5.04 rooms in private houses compared with 5.01 in 1921, but there was a substantial decline (from 4.04 to 3.51) in the average number of rooms in flats and tenements, so that the average number of rooms in all private dwellings declined from 4.97 in 1921 to 4.94 in 1933. The decreasing proportion of homes of the larger type is illustrated in the following table, which shows that homes of eight rooms or more comprised 10.22 per cent. of the number of occupied private dwellings in 1911, but declined to 6.54 per cent. in 1921 and 5.70 per cent. in 1933. A gradual improvement in the standard of housing is indicated by an increase in the proportion of dwellings with four, five or six rooms from 62.71 per cent. in 1911 to 71.68 per cent. in 1933:—

Number of Rooms per Dwelling.*	Occupied Private Dwellings in New South Wales.									
	1911.	1921.	1933.					Proportion of Total.		
			Metropolis.		Remainder of State.		Total.			
			Houses.	Flats, etc.	Houses.	Flats, etc.		1911.	1921.	1933.
1	20,321	12,787	1,062	2,336	20,563	777	24,738	per cent.	per cent.	per cent.
2	14,596	14,072	1,670	6,049	14,532	1,418	23,669	6.38	3.11	4.28
3	24,258	30,132	9,803	7,709	19,154	1,148	37,814	4.58	3.43	4.10
4	70,241	102,175	52,230	9,395	68,777	792	131,194	7.63	7.34	6.55
5	75,063	124,131	79,210	5,472	83,961	390	169,033	22.06	24.89	22.72
6	54,369	71,158	60,636	2,057	50,886	155	113,734	23.58	30.23	29.27
7	26,993	29,292	22,989	634	20,728	55	44,406	17.07	17.33	19.69
8	14,766	13,627	8,579	220	8,777	11	17,587	8.48	7.13	7.69
9	7,016	5,783	3,314	82	3,643	9	7,048	4.64	3.32	3.04
10	4,487	3,245	1,550	30	2,062	1	3,643	2.20	1.41	1.22
11-15	5,264	3,575	1,655	33	2,334	4	4,026	1.41	.79	.63
Over 15 ...	1,022	606	147	8	496	2	648	1.65	.87	.70
Not Stated	1,340	3,885	1,322	1,876	3,770	942	7,910	.32	.15	.11
Total	319,766	414,468	244,167	35,896	299,683	5,704	585,450	100	100	100

\* Kitchen is included as a room.

A classification of the private dwellings according to the materials used in construction shows a trend towards the use of the more enduring materials, the proportion of dwellings built of stone, brick, or concrete having increased from 39.1 per cent. in 1911 to 47.4 per cent. in 1933.

Materials used in Outer Walls.	Number of Occupied Private Dwellings.						Proportion per cent. of Total.		
	1911.	1921.	1933.			1911.	1921.	1933.	
			Metropolis.	Remainder of State.	Total.				
Wood ... ..	162,493	202,782	51,890	194,316	246,206	51.1	49.2	42.2	
Brick ... ..	114,679	166,558	215,505	45,181	260,686	36.0	40.4	44.7	
Stone, Concrete ... ..	9,885	12,290	6,231	9,760	15,991	3.1	3.0	2.7	
Iron ... ..	8,851	11,639	1,018	21,117	22,135	2.8	2.8	3.8	
Fibro-Cement ... ..	...	3,063	4,302	12,002	16,304	...	0.7	2.8	
Other ... ..	22,292	15,911	611	21,778	22,389	7.0	3.9	3.8	
Unspecified ... ..	1,566	2,225	506	1,233	1,739	...	...	...	
Total ... ..	319,766	414,468	280,063	305,387	585,450	100	100	100	

There is a preponderance of brick dwellings in the metropolitan area, where they represent 77.1 per cent. of the total. Outside the metropolis, dwellings of wood are most numerous, the proportion being 63.9 per cent.

Although the majority of private dwellings in the metropolis are occupied by tenants, the proportion declined from 66.3 per cent. in 1911 to 57.8 per cent. in 1933. Meanwhile the proportion occupied by owners increased from 26.3 per cent. to 27.6 per cent. and purchasers by instalments from 4.8 per cent. to 13.3 per cent.

In the extra metropolitan district the proportion occupied by owners in 1933 was 46.4 per cent., and those being purchased by instalments 8.8 per cent. The proportion of tenant occupiers was 37.4 per cent.

Nature of Occupancy.	Number of Occupied Private Dwellings.					Proportion per cent. of Total.		
	1911.	1921.	1933.			1911.	1921.	1933.
			Metropolis.	Remainder of State.	Total.			
Owner ... ..	120,423	147,483	76,536	136,902	213,438	40.47	36.48	37.30
Purchaser by Instalments	11,322	46,053	36,908	25,965	62,873	3.54	11.61	10.99
Tenant ... ..	160,314	192,474	160,260	110,480	270,740	50.14	47.14	47.30
Other methods ... ..	18,707	17,378	3,587	21,657	25,244	5.85	4.77	4.41
Not stated ... ..		10,180	2,772	10,383	13,155		...	...
Total ... ..	319,766	414,468	280,063	305,387	585,450	100	100	100

The increase in the number of dwellings occupied by persons who are purchasing them by instalments is to some extent due to the facilities for the financing of home purchases provided by the Government. The very

slight decline between 1921 and 1933 in the proportion of dwellings occupied by those acquiring ownership may be taken as an indication that the legislative relief granted to home-purchasers had obviated many forfeitures, which otherwise might have taken place during the depression.

#### *Construction of Dwellings.*

The Local Government Act confers extensive powers on municipal and shire councils for supervising and regulating the construction of buildings, and for promoting schemes of town-planning on modern lines. To assist the councils there is a Town Planning Advisory Board.

The practice of architecture is regulated by a Board of Architects. Persons using the name "architect" are required to be registered, registration being granted to persons over 21 years of age who possess the requisite qualifications. The Act does not apply to naval architects. In January, 1937, there were 716 registered architects.

Brick buildings predominate in the city and suburbs, and local sandstone, and concrete are used to a great extent in the construction of the larger buildings. For suburban dwellings the cottage plan is favoured, but popularity of the flat has greatly increased, especially in seaside suburbs. The maximum height of buildings in the metropolitan district is limited by law to 150 feet, except in the case of those erected for the purposes of public worship. Outside the city proper, permission must be obtained from the Chief Secretary for the erection of buildings over 100 feet high. The skyline must be approved by him and adequate provision must be made for protection against fire.

A Housing Improvement Board was appointed in 1937 for a period of twelve months to select areas in which steps should be taken to improve housing conditions and to formulate schemes for the purpose. The Board must submit its proposals for any scheme to the council of the area concerned, and after consideration of representations by the Council and objections of interested persons, may present the scheme for approval by the Governor. Upon approval an area may be proclaimed a clearance area in which an improvement scheme may be carried out. Where the Council is prepared to undertake a scheme in a clearance area, the State Treasurer may advance moneys therefor and the Council may be required to enter into an agreement for repayment with interest in half-yearly or yearly instalments. The amount of current advances of this nature may not exceed in the aggregate £500,000.

The Board is to report also as to further legislation necessary for the improvement of housing conditions, regional and town planning, etc. Advisory Committees may be constituted from time to time to report upon schemes and the carrying out of schemes upon reference by the Board or the Governor.

#### *New Buildings.*

The following statement shows the number of new buildings assessed by the Metropolitan Water, Sewerage, and Drainage Board in the metropolitan area in each year since 1927, as well as the cost of the new buildings assessed

and of additions to existing buildings. The information relates substantially to buildings completed during each year and is inclusive of Government buildings.

Year.	City of Sydney.		Suburbs.*		Metropolitan Area.*	
	Number of new buildings.	Cost of new buildings and additions to old buildings.	Number of new buildings.	Cost of new buildings and additions to old buildings.	Number of new buildings.	Cost of new buildings and additions to old buildings.
		£		£		£
1927	214	2,795,277	9,490	10,598,945	9,704	13,394,222
1928	324	3,630,037	10,216	11,496,270	10,540	15,126,307
1929	151	4,945,072	8,490	10,393,236	8,641	15,338,368
1930	231	2,865,204	4,691	5,616,313	4,922	8,431,517
1931	126	542,551	1,203	1,068,129	1,329	1,610,680
1932	74	1,073,622	1,069	680,541	1,143	1,754,163
1933	92	716,672	1,354	1,305,461	1,446	2,022,133
1934	152	538,034	2,711	2,632,174	2,863	3,170,208
1935	214	1,157,958	4,742	5,277,098	4,956	6,435,056
1936	280	2,080,049	6,108	6,550,988	6,338	8,631,037

\* Including suburbs listed in chapter Population of this Year Book except Dundas, Ermington and Rydalmere, and Holroyd.

Assessments by the Water, Sewerage, and Drainage Board are made when a building or a section of it is practically completed. Another aspect of the building operations is obtainable from records of the Local Government authorities concerning permits which must be obtained from the councils before construction is commenced. Particulars relating to the permits issued for new buildings and for additions and alterations in the metropolitan area and in country municipalities are shown below. Particulars of Government buildings are not included.

Year.	City of Sydney.			Suburban Municipalities.*			Country Municipalities.*		
	New Buildings.		Additions and Alterations. Estimated Cost.	New Buildings.		Additions and Alterations. Estimated Cost.	New Buildings.		Additions and Alterations. Estimated Cost.
	Number.	Estimated Cost.		Number.	Estimated Cost.		Number.	Estimated Cost.	
		£000	£000		£000	£000		£000	£000
1927	147	†	†	8,891	9,838	1,434	6,463	4,648	797
1928	123	†	†	8,705	9,768	1,520	5,801	4,391	909
1929	78	†	†	8,134	9,070	1,728	4,375	3,776	750
1930	46	†	†	2,129	2,356	699	1,945	1,496	446
1931	20	331	166	472	455	348	904	459	200
1932	12	119	349	676	658	440	1,126	594	277
1933	34	396	429	1,343	1,460	653	1,546	795	339
1934	46	590	555	3,058	3,676	845	2,931	1,760	486
1935	63	1,276	873	4,331	5,516	1,287	3,923	2,532	685
1936	106	1,556	753	5,416	6,383	1,438	4,325	2,982	891

\* Suburban municipalities include Auburn, Bankstown, Granville, Lidcombe, and Parramatta as from 1st January, 1929, and Dundas, Ermington and Rydalmere, and part of Holroyd, as from 1st January 1933. These areas were included formerly in country municipalities.

† Not available.

Information regarding the classes of new buildings for which permits were granted in the metropolitan area and in country municipalities during the last four years is shown below. The majority of the permits in the metropolis relate to dwellings of brick or concrete and in the country districts to dwellings of fibro-cement or weatherboard.

Particulars.	Number of New Buildings.				Estimated Cost.			
	1933.	1934.	1935.	1936.	1933.	1934.	1935.	1936.
Sydney and Suburbs.								
Private houses—					£000.	£000.	£000.	£000.
Bricks, concrete, etc. ...	745	2,020	2,793	3,515	771	2,051	2,696	3,247
Fibro-cement or weather-board ...	181	330	529	877	51	113	180	313
Blocks of flats ...	115	335	562	520	471	1,224	2,174	1,985
Shops with dwellings ...	72	81	126	153	111	95	139	181
Shops (only) ...	83	124	113	120	80	101	78	83
Factories ...	46	73	97	131	58	223	309	564
Garages, public ...	16	25	23	33	9	21	47	74
Other ...	119	116	151	173	305	438	1,168	1,492
Total ...	1,377	3,104	4,394	5,522	1,856	4,266	6,791	7,939
Country Municipalities.								
Private houses—								
Bricks, concrete, etc. ...	247	524	676	732	197	476	684	826
Fibro-cement or weather-board ...	944	1,907	2,648	2,947	349	855	1,148	1,326
Blocks of flats ...	4	16	40	31	6	29	139	58
Shops with dwellings ...	38	75	76	98	32	105	89	117
Shops (only) ...	104	142	178	228	85	86	160	258
Factories ...	23	19	25	26	9	12	19	35
Garages, public ...	20	39	33	41	6	16	18	28
Other ...	166	209	247	222	111	181	275	334
Total ...	1,546	2,931	3,923	4,325	795	1,760	2,532	2,982

The following statement shows the net additions to the number of dwellings in Sydney and the suburban municipalities during each year since 1929:—

Year.	New Dwellings.					Dwellings Demolished.	Net Number of Additional Dwellings.†
	Individual Houses.		Dwellings in Flats.*	Dwellings Attached to Shops.	Total New Dwellings.*		
	Brick, Concrete and Stone.	Fibro Cement and Weather-board.					
1929	5,704	1,391	2,362	550	10,007	153	9,854
1930	1,418	374	381	112	2,285	55	2,230
1931	237	133	32	33	435	39	396
1932	332	153	105	46	636	69	567
1933	745	181	833	133	1,892	103	1,789
1934	2,020	330	1,885	112	4,347	135	4,212
1935	2,793	529	3,908	173	7,403	145	7,258
1936	3,515	877	3,609	192	8,193	152	8,041

\* Including additional dwellings provided by converting buildings into flats.

New dwellings in flats represented 23.6 per cent. of the total new dwellings in 1929 and more than 47 per cent. during the three years 1934 to 1936.

The extent of building operations in various municipalities outside the metropolitan district is indicated by the following statement of the number of permits for new buildings granted during the last three years, and the estimated cost. Government buildings are not included. Only those municipalities are specified where the estimated cost exceeded £40,000 in any of these years, and the other municipalities are grouped:—

Country Municipalities.	Estimated Population at 31st December, 1936.	1934.		1935.		1936.	
		No.	Estimated Cost.	No.	Estimated Cost.	No.	Estimated Cost.
			£		£		£
Newcastle and Suburbs	108,720	370	238,690	716	540,704	887	731,006
Wollongong ... ..	12,660	141	120,522	146	141,917	236	223,032
Lismore ... ..	12,620	98	92,017	128	114,254	125	113,664
Albury ... ..	11,070	59	39,365	59	52,186	86	113,209
Wagga Wagga ... ..	12,330	68	65,633	96	87,593	96	87,642
Holroyd (part of) ... ..	8,230	65	31,142	141	54,653	154	75,044
Goulburn ... ..	15,260	39	31,680	67	51,176	52	72,646
Tamworth ... ..	10,530	61	54,325	82	62,531	73	67,404
Orange ... ..	10,030	29	23,170	58	43,797	60	65,871
Murwillumbah ... ..	4,400	51	26,716	64	43,221	63	53,357
Inverell ... ..	5,720	55	36,140	69	45,636	74	46,518
Bathurst ... ..	10,700	37	34,761	41	34,593	39	44,788
Katoomba ... ..	6,800†	27	15,236	41	121,943	62	40,817
Grafton ... ..	7,070	52	31,678	86	53,390	67	36,150
Dubbo ... ..	8,560	13	8,975	55	44,121	33	29,990
Moree ... ..	4,670	49	47,030	44	35,425	56	27,732
Other ... ..	337,940	1,717	863,164	2,030	1,004,457	2,162	1,152,765
Total ... ..	587,310	2,931	1,760,244	3,923	2,531,597	4,325	2,981,635

† Exclusive of persons in temporary summer residence.

Particulars relating to the municipality of Holroyd as shown above are exclusive of permits for buildings in the Pitt and Merrylands wards, which are within the metropolitan boundaries. The permits for new buildings in the whole municipality numbered 242 in 1936 and the estimated cost was £114,695.

### *The Cost of Building.*

A comparative statement is shown below as to the estimated cost of the materials and labour required for the erection in Sydney of a brick cottage with tiled roof, containing four rooms and kitchen, bathroom, pantry and front and back verandahs, including fencing and fittings such as bath, wash-tubs, copper and gas stove. The cost of the land and builder's overhead costs and profit are not included. A cottage of the type to which the estimates relate and the land might have been sold at £800 to £1,000 in various years since 1920.

The estimates are based on prices quoted in traders' lists and wages at industrial award rates. It is known that in years of great activity in building, *e.g.*, 1927 to 1929, listed prices of materials were closely adhered to and employees were paid at rates in excess of those prescribed by awards.

In depression years, on the other hand, materials could be purchased at concession prices and the practice of sub-contracting generally replaced the wage system in house building.

Date.	Estimated Cost.			Date.	Estimated Cost.		
	Materials.	Labour.	Total.		Materials.	Labour.	Total.
	£	£	£		£	£	£
1914, July ...	286	113	399	1927, June ...	479	215	694
1920, „ ...	532	189	721	1928, „ ...	469	217	686
1921, „ ...	535	193	728	1929, „ ...	466	219	685
1922, „ ...	501	188	689	1930, „ ...	438	215	653
1923, June ...	492	176	668	1931, „ ...	430	210	640
1924, „ ...	500	181	681	1935, December ...	381	174	555
1925, „ ...	486	187	673	1936, „ ...	413	176	589
1926, „ ...	486	208	694	1937, March ...	420	182	602

The average cost during the years 1925 to 1929 was £686, viz., materials £477 and labour £209. In December, 1935, the cost, estimated at £555, was 19 per cent. cheaper. It has since risen to £602, which is 12 per cent. below the average of pre-depression years.

#### ASSISTANCE TO HOME BUILDERS.

Provision has been made whereby persons who wish to acquire homes may, under prescribed conditions, obtain advances from public funds to defray the cost of erection, etc., repayments being extended over a period of years. Measures have been adopted also to promote co-operative financing of home building.

There are a large number of co-operative building societies, as described in the chapter "Private Finance" of this Year Book. The State Government, on the recommendation of the Co-operative Building Advisory Committee, may guarantee bank overdrafts on behalf of building societies registered under the Co-operation Act, and arrangements were made recently to enable the societies to increase their advances to members up to 90 per cent. of the valuation of the security offered. The Government undertakes, where certain conditions have been observed, to indemnify the societies in respect of loss attributable to the fact that such advances have exceeded 80 per cent. of valuation.

Operations in connection with Government advances for housing are administered by the Rural Bank of New South Wales—the principal scheme in the Advances for Homes department, and other schemes in its Government agency department, viz., the Home Building Agency, the Government Housing Agency and the Building Relief Agency, which are described below. The Advances for Homes Department and Government Housing Agency were formerly administered as departments of the Government Savings Bank of New South Wales.

The Advances for Homes Department was organised in 1913 to make advances to home builders from the Government Savings Bank funds. The limit of advances was fixed at 75 per cent. of the value of the borrower's interest in the property, the maximum advance being £750, and the term of the loans ranged up to thirty years. During the year 1928-29 the maximum advance was raised to £1,000 where this sum did not exceed 75 per cent. of the valuation of the property, and building loans were advanced up to 90 per cent. of valuation where the building contract was controlled by

the Department. Funds from the Commonwealth Savings Bank also were made available to the Advances for Homes Department in terms of the Commonwealth Housing Act, 1927. The limit of advances from these moneys was 90 per cent. of valuation up to £1,800.

In February, 1934, the State Government made arrangements to supplement the advances made by the Advances for Homes Department, which did not exceed 75 per cent. of valuation. In such cases the Government provided funds for a further loan up to 10 per cent. of valuation (but not more than £200 in any case). Administration is the work of the Home-Building Agency, and at 30th June, 1936, there were 2,846 loans outstanding for a total sum of £227,951. The issue of new supplementary advances was discontinued in 1937.

The number and amount of advances for homes made by the Advances for Homes Department during the last ten years are shown below. Supplementary advances from Government funds during the years 1933-34 to 1935-36 are included.

Year ended 30th June.	Advances made.		Year ended 30th June.	Advances made.	
	No.	Amount.		No.	Amount.
		£			£
1927	2,573	1,519,610	1932	8	8,495
1928	3,019	1,794,435	1933	4	6,963
1929	2,628	1,690,803	1934	235	97,760
1930	2,889	2,177,759	1935	1,636	1,094,188
1931	216	220,928	1936	1,665	1,131,889

The number of these loans outstanding at 30th June, 1936, was 25,007 for an aggregate amount of £12,535,869, viz., 23,620 loans for the building or purchase of homes or the discharge of mortgages, amounting to £11,488,979; and 367 loans in respect of homes erected by the bank, £263,476; and 1,022 loans from funds made available by the Commonwealth Savings Bank, £783,414.

The Building Relief scheme was initiated in 1932 by the Unemployment Relief Council to relieve unemployment in the building trades. Loans are made for repairs or additions to dwellings. Since 1st July, 1935, the scheme has been administered by the Building Relief Agency of the Rural Bank. The number of advances made to 30th June, 1936, was 9,454, and the amount £913,136. At that date 6,782 loans, amounting to £442,553, were outstanding.

The Government Housing Agency administers accounts representing advances made by the Housing Board, which was appointed under the Housing Act of 1912 and dissolved in 1924. The outstanding loans numbered 812 at 30th June, 1936, and the amount of principal outstanding was £435,321.

#### *Housing of the Unemployed.*

A trust was constituted in terms of the Housing of the Unemployed Act, 1934, to deal with the problem of providing housing for the unemployed and others in necessitous circumstances. The Trust consists of the Minister for Social Services, and eight honorary members appointed by the Governor. It may purchase or lease land, erect buildings and let or sell them, supply building material (or advance money for its purchase) for erection, repair, or improvement of buildings intended for use as a home, either to unemployed or necessitous persons themselves, or to

organisations which assist in the housing of indigent persons. The Trust may pay on behalf of such persons rates, taxes, or Crown dues, and insurance premiums and the cost of repairs, etc., rent, wholly or in part, and interest and instalments of principal due in respect of mortgages of homes.

Moneys for the purposes of the Trust are advanced by the Treasury. An initial grant of £200,000 was appropriated in June, 1934. At 10th October, 1936, the Trust had provided 310 residences, 31 were under construction, and tenders had been called for 17. Advances for building materials had been made in 642 cases, the total sum being £40,186. In addition, 881 persons had been given small free grants for building temporary homes or for repairs, value £6,380. The expenditure to 30th June, 1936, amounted to £79,792. The tenant purchasers repay the cost of the homes at the rate of 6s. per week, and repayments of advances for building materials range from 2s. 6d. to 6s. per week. Interest is charged at the rate of 2 per cent.

A settlement on the outskirts of the metropolitan area known as Hammondville has been privately organised for unemployed persons. Over 90 families have been provided with homes which they may purchase on easy terms.

#### *Governmental and Municipal Housing.*

Daceyville, a model suburb built by the State Government, is about 5 miles from the City of Sydney. It is managed by the Public Trustee under power of attorney from the Minister for Local Government. The cost as at 30th June, 1936, was £181,277. The income of the year 1935-36 was £18,757, including rents £18,252. Interest, administration and maintenance amounted to £13,977.

The Municipal Council of the City of Sydney controls four blocks of workmen's dwellings. The Strickland buildings were opened in April, 1914. They consist of 8 shops and 71 self-contained flats of two, three or six rooms. The rents range from 11s. 7d. to 26s. per week. The Dowling-street dwellings, opened on 29th June, 1925, consist of 30 flats of four or five rooms, for which the rentals are 20s. 2d. to 22s. 6d. per week. The Pyrmont dwellings were opened on 2nd November, 1925. They contain 41 flats of four or five rooms, and the weekly rentals range from 13s. 7d. to 17s. 6d. The Alexandria dwellings, opened on 17th October, 1927, consist of 23 dwellings and a shop. The rental is 20s. per week for the dwellings and 46s. 6d. for the shop and dwelling. The total cost, including the land, was—Strickland Buildings, £49,667; Dowling-street Dwellings, £24,070; Pyrmont Dwellings, £34,549; and Alexandria Dwellings, £30,442.

#### *War Service Homes.*

The Commonwealth Government assists Australian sailors and soldiers and their female dependants to acquire homes, the operations being conducted under the Commonwealth War Service Homes Act, 1918-1935.

A summary of the activities in New South Wales of the Commission charged with the administration of the Act shows that 13,780 applications had been approved up to 30th June, 1936, and 12,183 homes had been provided, viz., 6,585 newly constructed houses, 4,252 existing dwellings and 1,346 by discharge of mortgages.

The sums paid as instalments of principal and interest to 30th June, 1936, amounted to £6,294,504, and arrears of instalments at that date amounted to £405,594, or 6.05 per cent. of the total amount due.

## PARKS, RECREATION RESERVES, AND COMMONS.

Under the Public Parks Act the Governor may appoint trustees of any lands proclaimed for the purposes of public recreation, convenience, health, or enjoyment. The trustees are empowered to frame by-laws regarding the use of the land by the public and for the protection of shrubs, trees, etc.

The public parks and recreation reserves which are not committed to special trustees are controlled by municipal and shire councils. All the towns of importance possess extensive parks and recreation reserves.

The city of Sydney contains within its boundaries 625 acres of parks, squares, and public gardens. The most important are Moore Park, where about 354 acres are available for public recreation, including the Sydney Cricket Ground and the Royal Agricultural Society's Ground; the Botanic Gardens and Garden Palace Grounds, 65 acres, with the adjoining Domain of 86 acres, ideally situated on the shores of the Harbour; and Hyde Park, 37 acres, in the centre of the city. In addition, the Centennial Park, 474 acres in extent, on the outskirts of the city, reserved formerly for the water supply, is used for recreation, the ground having been cleared, planted, and laid out with walks and drives.

It has been ascertained that there are over 12,200 acres of public parks and reserves in metropolitan municipalities. This figure, representing nearly 8 per cent. of their aggregate area, is exclusive of some parks and reserves which the municipalities have acquired by gift or by purchase from private owners.

The Zoological Gardens at Taronga Park, on the northern side of the Harbour, were opened in 1916. The area is nearly 57 acres. In their preparation their natural formation has been retained as far as practicable with the object of displaying the animals in natural surroundings. An aquarium has been built within the gardens.

The National Park, situated about 16 miles south of Sydney, was dedicated in December, 1879. The total area is 33,832 acres. The park surrounds the picturesque bay of Port Hacking, and extends in a southerly direction towards the mountainous district of Illawarra. It contains fine virgin forests with attractive scenery.

Another large tract of land, the Kuring-gai Chase, was dedicated in December, 1894, for public use. The area of the Chase is 35,370 acres, and contains portions of the parishes of Broken Bay, Cowan, Gordon, and South Colah. This park lies about 15 miles north of Sydney, and is accessible by railway at various points, or by water, *via* the Hawkesbury River. Several creeks, notably Cowan Creek, intersect it.

In 1905 an area of 248 acres was proclaimed as a recreation ground at Kurnell, on the southern headland of Botany Bay, a spot famous as the landing-place of Captain Cook. Parramatta Park (252 acres) is of historic interest.

Surrounding many country towns there exist considerable areas of land reserved as commons, on which stock owned by the townsfolk may be depastured. The use of these lands is regulated by local authorities. Nominal fees are usually charged to defray the cost of supervision and maintenance. Many of these commons are reserved permanently, but a large number are only temporary.

The area reserved for parks and recreation reserves, excluding alienated lands acquired by local councils or donated by private persons, was 322,463 acres at 30th June, 1936; the area of permanent commons was about 37,000 acres, and 316,989 acres were reserved temporarily as commons.

## PUBLIC ENTERTAINMENTS.

*Theatres and Public Halls, etc.*

Buildings in which public meetings (excluding meetings for religious worship) or public entertainments are held, must be licensed under the Theatres and Public Halls Act, 1908. A license may be refused if proper provision is not made for public safety, health, and convenience, or if the site or building is unsuitable for the purpose of public meeting or entertainment. Plans of buildings intended to be used for theatres and public halls must be approved by the Chief Secretary before erection is begun. Licenses are granted for a period of one year, and premises are subjected to inspection before renewal. A license or renewal of a license may be withheld until such alterations or improvements as may be deemed necessary are effected.

During the year ended 30th June, 1936, buildings licensed under the Act numbered 2,636, and they provided accommodation for approximately 1,159,000 persons. The total amount of fees received for the licensing of such buildings during 1935-36 was £4,716.

Cinematograph films are subject to censorship prior to exhibition in New South Wales, those imported from oversea countries being reviewed by the Commonwealth customs authorities, and those made in Australia by a State board.

With the object of encouraging the production of cinematograph films in Australia, distributors are required to make available, and exhibitors to show a certain proportion of Australian films, in terms of the Cinematograph Films (Australian Quota) Act, 1935. The law refers generally to films over 5,000 feet in length, but it may be applied also to those between 3,000 feet and 5,000 feet. The distributor's quota, expressed as a proportion of the total number of films (other than British) rises from 5 per cent. to 15 per cent. over a period of five years, and the exhibitor's quota from 4 per cent. to 12½ per cent.

The requirements of the Act may be modified upon recommendation of the Films Advisory Committee constituted under the Act.

*Horse-racing.*

Horse racing, which includes pony racing and trotting races, is a popular form of sport in New South Wales, and with it is associated a large amount of betting. Racecourses must be licensed. If a racecourse is used for more than one class of racing—horse racing, pony racing, or trotting—a separate licence must be obtained for each class. In June, 1937, the licensed racecourses numbered 229, and the licenses issued in respect thereof numbered 252.

The maximum number of racing days on metropolitan racecourses in any year was fixed by an Act passed in December, 1932, at 57 for horse racing, 54 for pony racing, and 40 for trotting contests—the licenses for trotting being restricted to two racecourses.

In the district of Newcastle the maximum number of days for horse racing was 90 per annum, of which 65 were for horse racing on six racecourses. In recent years meetings for horse races have been held on two racecourses only. To one of these, with a normal limit of 15 days per annum, additional days up to 10 per annum may be allotted as long as the right to hold meetings on the other racecourses is not fully exercised.

In November, 1931, a law was passed for the regulation of greyhound racing on racecourses specially licensed therefor. Not more than two racecourses may be licensed in the metropolitan district, and not more than one in any town outside the metropolitan area. Meetings may not be held on a licensed racecourse on more than fifty-two days in a year. In 1935-36 forty-three grounds were licensed for this class of sport—one being in the metropolitan area, three in the Newcastle District and 39 in country areas.

Betting or wagering is prohibited in connection with any sports except horse, pony, trotting and greyhound races on licensed racecourses, and coursing on grounds approved by the Chief Secretary, and betting or wagering is illegal after sunset on licensed racecourses or coursing grounds except at greyhound races. Racing clubs may be required by the Colonial Treasurer to instal totalisators on their racecourses and to use them at every race meeting.

To facilitate the collection of stamp duty in respect of betting, bookmakers are required to use stamped tickets and to keep a record of credit bets. During the year ended 30th June, 1936, the number of betting tickets issued to bookmakers was 16,580,000, and approximately 500,000 credit bets were recorded. The investments on totalisators during 1935-36, amounted to £1,444,931, an increase of £20,059 compared with the preceding year.

Since 1st October, 1932, a tax of 1 per cent. has been levied on the bookmakers' turnover, i.e., the total amount of bets made by backers with bookmakers. The amount collected during the year ended 30th June, 1936, was £117,302.

Particulars relating to taxes in connection with racing are shown in the chapter relating to Public Finance.

### *State Lotteries.*

State lotteries are conducted in New South Wales, in terms of the State Lotteries Act, 1930, which was brought into operation by proclamation on 22nd June, 1931. The administration of the Act is entrusted to a director, and the lotteries are conducted on the cash-prize system. From the proceeds of the sale of tickets in each lottery a sum is apportioned for prizes and the balance is payable to consolidated revenue. The first lottery was drawn on 20th August, 1931.

Up to 30th June, 1936, the number of lotteries filled was 357, and 356 had been drawn. The proceeds of sale of tickets amounted to £9,716,737, including £20,539 in respect of an incomplete lottery. Prizes amounted to £6,019,129; administrative expenses and preliminary charges, such as salaries, office equipment, and alterations to buildings, to £288,189. The net surplus to 30th June, 1936, was £3,372,689.

### TAXATION OF PUBLIC ENTERTAINMENTS.

#### *State Entertainments Tax.*

The State Government imposed a tax on entertainments as from 1st January, 1930. Admissions are taxable if payments exceed 1s. 6d., at the following rates:—Over 1s. 6d. and under 2s., tax  $\frac{1}{4}$ d.; 2s. and over, tax 1d. for the first 2s. and  $\frac{1}{4}$ d. for each additional 6d. Payments for admission to entertainments made in the form of a lump sum, as a sub-

scription to a club or association, or for a season ticket, are taxed on the amount of the lump sum. Certain entertainments are exempt from taxation where the proceeds are wholly devoted to philanthropic, religious, charitable or educational purposes, also entertainments which are entirely in the nature of an athletic sport or game and the proceeds are wholly applied to the furtherance of athletic sports or games, and not for the profit of the individual members of the organisation conducting the entertainment. Admissions to race meetings are exempt from this tax where they are taxable under the Racecourses Admission Tax Act which is described in the chapter Public Finance.

By agreement between the State and Commonwealth Governments the Federal Taxation Commissioner collects the Entertainments tax.

A classification of admissions taxable under the Entertainments Tax Act during the years 1930 to 1936 is shown below:—

Year.	Racing.	Theatres.	Picture Shows.	Dancing and Skating.	Other.	Total.
Taxable Admissions.						
	No.	No.	No.	No.	No.	No.
1930 ... ..	275,231	1,263,601	11,388,188	920,513	975,903	14,823,436
1931 ... ..	173,830	1,027,900	7,931,410	816,623	748,563	10,698,326
1932 ... ..	163,103	955,621	6,731,163	666,935	868,957	9,385,779
1933 ... ..	147,677	1,068,118	7,527,753	685,198	755,482	10,184,228
1934 ... ..	207,566	1,287,804	8,053,646	844,970	549,905	10,943,891
1935 ... ..	181,692	1,144,207	9,727,466	842,767	1,052,908	12,949,040
1936 ... ..	231,095	1,041,199	11,254,910	1,057,812	1,554,825	15,139,841
Tax Collections.						
	£	£	£	£	£	£
1930 ... ..	7,750	14,071	62,185	6,804	7,378	98,188
1931 ... ..	4,244	9,687	38,584	4,528	4,490	61,533
1932 ... ..	3,482	10,111	31,371	4,060	5,124	54,148
1933 ... ..	3,930	9,825	32,069	4,042	4,482	54,348
1934 ... ..	5,467	13,069	35,152	5,196	3,337	62,221
1935 ... ..	5,906	11,592	45,877	6,115	6,896	76,386
1936 ... ..	6,223	9,713	53,673	8,266	10,639	88,514

The entertainment tax on racing in the less populous parts of the State amounted to £6,223 in the calendar year 1936, and the collections in other places under the Racecourses Admission Tax Act to £81,154, so that the taxation on admissions to racing exceeds the total tax on all other classes of entertainments. Admissions to picture shows, which yield the greater part of the entertainments tax rank next in order, then theatres. The collection of entertainments tax declined by 45 per cent. between 1930 and 1932, though the decline in taxable admissions was only 13 per cent. Since 1932 there has been an increase of more than 60 per cent. in both collections and admissions. The number of taxable admissions in 1936 exceeded the number in 1930 by 2 per cent.

An analysis of the collections in each year, according to the charges for admission, as shown below, indicates that in 1930 taxable admissions were most numerous at 2s., representing 44 per cent. of the total. In later years the patronage of cheaper admissions increased to form the most numerous group, and the proportion of charges between 1s. 6d. and 2s. increased from 12.7 per cent. in 1930 to 41.1 per cent. in 1936. Admissions

at charges exceeding 3s. were more numerous, absolutely and relatively, in 1936 than in any other year since the tax was introduced.

Year.	Charges for Taxable Admissions (Entertainments Tax).						
	Over 1s. 6d. and under 2s.	2s.	Over 2s. to 2s. 6d.	Over 2s. 6d. to 3s.	Over 3s. to 5s.	Over 5s.	Total.
	No.	No.	No.	No.	No.	No.	No.
1930 ...	1,880,393	6,503,612	2,824,802	1,859,008	1,216,115	539,416	14,823,436
1931 ...	2,624,891	3,843,334	2,216,238	1,036,982	717,160	259,721	10,698,326
1932 ...	3,016,625	2,711,670	1,775,402	818,743	756,241	307,098	9,385,779
1933 ...	3,891,493	2,668,818	2,000,953	762,434	548,820	311,710	10,184,228
1934 ...	4,224,871	2,725,332	1,937,914	915,832	729,345	410,597	10,943,891
1935 ...	4,960,888	2,461,375	2,641,418	1,243,473	1,241,767	400,119	12,949,040
1936 ...	6,228,405	2,073,560	3,326,504	1,449,715	1,614,047	447,610	15,139,841

#### REGULATION OF LIQUOR TRADE.

The sale of intoxicating liquor is subject to regulation by the State Government in terms of the Liquor Act of 1912 and subsequent amendments. The sale of intoxicating liquor except by persons holding a license is prohibited. Several kinds of licenses are granted, viz., publican's, packet, Australian wine, club, booth or stand, and railway refreshment room, all of which authorise the sale of liquor in small quantities; and spirit merchant's and brewer's for the sale in large quantities.

The authority given by each of these licenses and the conditions attached thereto are described in the 1928-29 issue of this Year Book.

The licenses are issued by the Licensing Court in each district, except the railway refreshment room licenses, which are issued by executive authority. Three magistrates constitute the licensing courts and discharge the functions of the Licenses Reduction Board, which was authorised by an Act of 1919 to reduce the number of publicans' and Australian wine licenses.

The Board may reduce the number of publicans' licenses in any electorate where the existing licenses exceed the "statutory number" prescribed by the Act, which is proportionate to the number of electors. The number of wine licenses in any electorate may be reduced by one-fourth of the number in existence on 1st January, 1923, and a greater reduction may be made where considered necessary in the public interest.

The number of publicans' licenses in existence on 1st January, 1920, was 2,539, of which 2,085 were in fourteen electorates with more than the statutory number, and the maximum reduction which the Act authorised the Board to make was 483. The Australian wine licenses on the 1st January, 1923, numbered 441 of which 220 were in the metropolitan electorates.

Subsequent changes in the number of licenses up to 31st December, 1936, are summarised below:—

Licenses.						Publicans.	Australian Wine.
Number at 1st January, 1920 ...	...	...	...	...	...	2539	441*
Terminated by order of Board ...	...	...	...	...	...	291	65
surrender to Board ...	...	...	...	...	...	196	13
expiration of licenses, etc. ...	...	...	...	...	...	71	16
						558	94
New licenses granted ...	...	...	...	...	...	60	3
Number at 31st December, 1936 ...	...	...	...	...	...	2,041	350

\* At 1st January, 1923.

In 1936, five hotels were delicensed. At 31st December, 1936, there were 534 publicans' licenses and 159 Australian wine licenses in the metropolitan licensing district, and there were 62 publicans' and 9 wine licenses in the Parramatta district, 114 publicans' and 11 wine licenses in Newcastle, 57 publicans' and 12 wine licenses in Maitland, and 48 publicans' and 7 wine licenses in Broken Hill.

When deprived of their hotel licenses the holders, owners, lessees, etc., of the premises are entitled to compensation, as assessed by the Board from a fund obtained by levies on the licensees.

The licensee is paid as compensation for each year of the unexpired term of his tenancy (up to three years), the average annual net profit during the preceding period of three years. The compensation paid to owners, lessees, etc., of hotel premises is based on the amount by which the net return from the premises over a period of three years is diminished by being deprived of a license. Appeals against the determinations of the Board in respect of the compensation awarded may be made to the Land and Valuation Court.

In the case of wine licenses, only the licensees are entitled to compensation.

Compensation is paid from the Compensation Fund formed from levies paid by licensees up to 31st December, 1926. The levy was discontinued because the credit balance of the fund at that date was sufficient to meet claims for compensation and costs of administration for a number of years. The receipts of the fund to 30th June, 1936, amounted to £1,612,783, including interest earnings (to 31st December, 1927) £115,606. The payments were £1,264,409, including £872,445 as compensation, £141,964 for administration, and £250,000 transferred to the Consolidated Revenue Fund of the State. The credit balance at 30th June, 1936, was £348,375.

Up to the end of the year 1936 compensation had been awarded in respect of 484 publicans' licenses terminated by order of the Board or by surrender thereto. The amount, £812,380, was distributed as follows:—Licensees, £277,961; owners of premises, £521,494; and lessees, £12,925. Compensation had not yet been awarded in the case of three hotels. Compensation to 77 wine licensees amounted to £63,830, and in one other case compensation was not claimed.

The number of licenses for the sale of intoxicating liquor issued during various years since 1901 is shown below:—

Licenses.	1901.	1911.	1921.	1931.	1935.	1936.
Publicans' ... ..	3,151	2,775	2,488	2,134	2,050	2,050
Additional Bar ... ..	...	118	153	263	369	257
Permits to Supply Liquor with Meals—(6 p.m. to 9 p.m.) ... ..	...	...	...	118	187	208
Club ... ..	...	76	78	83	84	84
Railway Refreshment—						
General Liquor ... ..	22	24	29	59	43	43
Wine ... ..	*	*	*	14	11	11
Booth or Stand ... ..	1,787	1,829	2,337	2,054	2,196	2,245
Packet ... ..	20	24	13	6	6	4
Australian Wine ... ..	675	532	450	360	352	351
Spirit Merchants' ... ..	225	198	244	241	225	229
Brewers' ... ..	53	39	17	6	5	7

\* Not available.

The annual fees payable for new licenses in respect of hotels, packets, and Australian wine are assessed by the Licensing Court, the maximum fees being £500, £20, and £50 respectively. Clubs pay £5 per annum for the first

40 members, and £1 for each additional forty. Spirit merchants pay £30 in the metropolitan district and £20 elsewhere. For renewals of publicans', packet, wine, club, and spirit merchants' licenses the annual fees are assessed by the Licenses Reduction Board according to the amount spent by the licensees in the purchase of liquor during the preceding calendar year. Except that spirit merchants do not pay on the liquor sold by them to persons licensed to sell liquor, and they pay a minimum fee of £30 in the metropolitan district and £20 elsewhere. The owner of the premises is liable for two-fifths of the license fee, but if his share exceeds one-third of the rent he may obtain a refund of part or the whole of the excess as determined by the Board.

The fees for licenses in respect of railway refreshment rooms are assessed at the same rate as those for publicans' licenses, but the Railway Commissioners do not pay the fees assessed for those refreshment rooms for which Australian wine licenses only are issued.

Brewers pay £50 per annum in the metropolitan district and £25 in other districts. For booth and stand licenses, which are temporary permits granted to licensed publicans for the sale of liquor at places of public amusement, the fee is £2 per day.

The amount expended by licensees in the purchase of liquor in the calendar years 1929 and 1932 to 1935, which was the basis of the fees for the renewal of various classes of licenses, and the fees assessed during the years ended six months later, are shown below:—

Licenses,	1929.	1932.	1933.	1934.	1935.
	£	£	£	£	£
Purchases by licensees ...	10,410,456	6,064,659	6,123,185	6,701,668	7,311,350
	1929-30.	1932-33.	1933-34.	1934-35.	1935-36.
Fees assessed on purchases—					
Publicans' ...	462,858	268,635	271,551	297,947	326,218
Club ...	4,418	3,132	3,185	3,274	3,609
Railway Refreshment ...	2,172	1,186	1,111	1,386	1,446
Packet ...	38	21	17	25	21
Australian Wine ...	6,460	4,656	4,666	4,765	4,894
Spirit Merchants' ...	11,032	7,749	7,785	8,390	8,722
Other fees—					
Brewers' ...	250	293	284	225	254
Booth or Stand ...	6,148	4,611	5,202	5,225	5,326

### *Consumption of Intoxicants.*

The information in the following table was obtained from the Licenses Reduction Board to show the quantity of spirits, wines and beers purchased by holders of liquor licenses for retailing to the public, together with the quantity sold direct to the public by wholesale wine and spirit merchants.

The figures may be taken as the consumption of intoxicating liquor by the public. It is difficult to estimate the expenditure by the public on intoxicating liquor; numerous difficulties are met with, as liquor is sold at varying prices not only in different localities, but in hotels in the same district and even in the different bars of the same hotel. There is also the fact that the percentage of profit on bottle sales is less than that of bar sales. However, the figures shown in the table are published as a reasonably accurate estimate of the expenditure by the public on intoxicating liquor.

The following table gives this information for the years 1930 to 1935.

Year.	Quantity Purchased by Licensees.			Estimated Expenditure by the Public on Intoxicants.	
	Beer.	Wine.	Spirits.	Total.	Per Head of Population.
	Gallons.	Gallons.	Gallons.	£	£ s. d.
1930 ... ..	22,512,000	1,385,743	789,470	12,370,000	4 17 8
1931 ... ..	18,192,000	1,261,335	686,208	10,800,000	4 4 6
1932 ... ..	18,042,000	1,271,318	610,484	10,620,000	4 2 4
1933 ... ..	18,925,000	1,473,094	617,468	10,740,300	4 2 7
1934 ... ..	21,573,000	1,559,573	716,816	11,750,000	4 9 7
1935 ... ..	23,764,000	1,619,248	791,406	12,803,000	4 16 9

In the foregoing table the quantities of spirits are shown in liquid gallons, not proof gallons. Proof spirit means spirit of a strength equal to that of pure ethyl alcohol compounded with distilled water so that the resultant mixture at a temperature of 60 degrees Fahrenheit has a specific gravity of 0.91976 as compared with that of distilled water at the same temperature. The standard strength of whisky, brandy, gin and rum may not be less than 35 degrees under proof, and spirits of the best quality are retailed usually at about 30.5 degrees under proof. Prior to 24th December, 1930, the minimum strength of whisky and brandy was 25 degrees under proof, and in the retail trade it was sold usually at about 23.5 degrees under proof.

Practically the whole of the beer and the wine consumed in the State is of Australian origin, and slightly more than half of the spirits is imported, but the proportion of Australian spirits tends to increase. Information as to the operation of breweries in New South Wales appears in the chapter "Factories" of this Year Book.

### *Drunkenness.*

Persons apprehended by the police for drunkenness in public places may be charged in the Courts of Petty Sessions. It is the practice in the metropolitan police district to release such persons before trial if they deposit as bail an amount equal to the usual penalty imposed. If they do not appear for trial the deposits are forfeited, and further action is not taken.

During the year 1936 the number of persons charged with drunkenness was 31,383, of whom 2,222 were females. In the case of 975 males and 111 females the charges were withdrawn or dismissed, 16,137 males and 845 females were convicted after trial by the Courts, and 12,049 males and 1,266 females, who did not appear for trial, forfeited their bail. The

following statement shows the number of convictions for drunkenness, including the cases in which bail was forfeited, during 1921, 1929, and each of the last six years:—

Year.	Convicted after trial.		Bail Forfeited.		Total Convictions.			Cases per 1,000 of mean population.
	Males.	Females.	Males.	Females.	Males.	Females.	Total.	
1921	18,525	1,172	8,233	772	26,758	1,944	28,702	13.61
1929	19,769	1,330	10,920	1,117	30,689	2,447	33,136	13.24
1931	13,285	1,472	5,068	734	18,353	2,206	20,559	8.04
1932	14,320	1,401	5,695	694	19,415	2,095	21,510	8.34
1933	17,081	1,363	6,123	854	23,204	2,217	25,421	9.77
1934	15,506	693	9,038	1,107	24,544	1,800	26,344	10.03
1935	15,786	846	10,173	1,018	25,959	1,864	27,823	10.52
1936	16,137	845	12,049	1,266	28,186	2,111	30,297	11.31

Relatively to the population, the number of convictions for drunkenness 14.29 per 1,000 in 1928 was the highest since 1923. A progressive decline brought the proportion to 8.04 in 1931. Then the trend was reversed, though in 1936 the proportion was still nearly 21 per cent. lower than in 1928.

#### *Treatment of Inebriates.*

The Inebriates Act was designed to provide treatment for two classes of inebriates—those who have been convicted of an offence, and those who have not come in this way under the cognisance of the law.

For the care and treatment of the latter class, the Act authorises the establishment of State institutions under the control of the Inspector-General of Insane. Judges, police magistrates, and the Master-in-Lunacy may order that an inebriate be bound over to abstain, or that he be placed in a State or licensed institution, or under the care of an attendant controlled by the Master-in-Lunacy, or of a guardian, for a period not exceeding twelve months. Provision is made also to enable an inebriate to enter voluntarily into recognisances to abstain.

An inebriate convicted of an offence of which drunkenness is a factor, or, in certain cases, a contributing cause, may be required to enter into recognisances for a period of not less than twelve months, during which he must report periodically to the police; or he may be placed in a State institution under the direction of the Comptroller-General of Prisons.

Some of the State Mental Hospitals have been gazetted under the Inebriates Act for the detention of inebriates, and the number under the supervision of the Inspector-General of Mental Hospitals at 30th June, 1936, was 44, viz., 38 men and 6 women.

The majority of persons admitted to the institutions for inebriates are over 40 years of age. During the period dating from the first reception in August, 1907, to 30th June, 1936, the total number of original receptions amounted to 1,899—917 men and 982 women.

#### CONSUMPTION OF TOBACCO.

Persons who sell tobacco, cigars, or cigarettes in New South Wales must obtain a license, for which an annual fee of 5s. is charged. The number of licenses issued in 1936 was 21,466. The sale of tobacco to juveniles under the age of 16 years is prohibited.

The quantity of tobacco consumed in New South Wales, as estimated at intervals since 1901, is shown in the following statement:—

Year.	Total Consumption (000 omitted).				Per Head of Population.			
	Tobacco.	Cigars.	Cigarettes.	Total.	Tobacco.	Cigars.	Cigarettes.	Total.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1901	2,977	215	368	3,560	2·13	·15	·27	2·60
1911	3,827	271	1,076	5,174	2·30	·16	·65	3·11
1920-21	4,370	273	1,958	6,601	2·09	·13	·94	3·16
1928-29	5,631	185	2,446	8,262	2·27	·07	·99	3·33
1930-31	5,215	124	1,833	7,172	2·05	·05	·72	2·82
1931-32	5,214	96	1,641	6,951	2·03	·04	·64	2·71
1932-33	4,521	102	1,648	6,271	1·75	·04	·64	2·43
1933-34	5,379	109	1,713	7,201	2·06	·04	·66	2·76
1934-35	5,454	91	1,838	7,383	2·07	·03	·70	2·80
1935-36	5,767	121	1,990	7,878	2·17	·05	·75	2·97

\* Factory made.

The quantity of tobacco (including cigars and cigarettes) consumed in 1935-36 was 7,878,000 lb., and the average 3 lb. per head. The annual consumption per head declined by 27 per cent. during the four years ended 30th June, 1933, but had increased by 1935-36 to 89 per cent. of the maximum, 3·33 lb. per head, recorded in 1928-29.

The tobacco consumed in 1935-36 consisted of 7,798,000 lb. manufactured in Australia, principally from imported leaf, and 80,000 lb. manufactured overseas. Almost all the ordinary tobacco and cigarettes were made in Australia, and 95 per cent. of the cigars, as compared with 87 per cent. and 46 per cent. respectively in 1911.

As regards the description of tobacco used, the figures relating to cigarettes do not include the tobacco made into cigarettes by the consumers themselves and recorded as ordinary tobacco. That this practice has been widely adopted by consumers in recent years is indicated by the records of the Trade and Customs Department, which show that duty was paid in Australia on 91 million packets of 60 papers in 1935-36, as compared with 55 million packets in 1932-33.

It is estimated that the expenditure on tobacco (including cigarette papers) in 1935-36 amounted to £7,300,000, or £2 13s. 6d. per head of population.

#### LICENSES FOR VARIOUS OCCUPATIONS.

Partly as a means of raising revenue and partly as a means of ensuring a certain amount of supervision over persons who follow callings which bring them into contact with the general public, or which are carried on under special conditions, licenses must be obtained by auctioneers, pawnbrokers, hawkers, pedlars, collectors, second-hand dealers, fishermen, and persons who sell tobacco, conduct billiard and bagatelle tables, or engage in Sunday trading. The Pistol License Act, 1927, prescribes the licensing of pistols; licenses may not be issued to persons under 18 years of age.

Auctioneers' licenses are divided into two classes, viz., general and district, the annual fee for a general license being £15, and for each district license £2. General licenses are available for all parts of the State. District licenses only cover the police district for which they are issued, and they are not issued for the Metropolitan district. Auctioneers' licenses may not be granted to licensed pawnbrokers. Sales by auction are illegal after sunset or before sunrise, except that permission may be given for wool to be put up to sale or sold after sunset. Where provision has been made for reciprocity with New South Wales, auctioneers resident and licensed in other Australian States may obtain general licenses in New South Wales.

For pawnbrokers' licenses an annual fee of £10 is payable. The hours for receiving pledges are limited, with certain exceptions, to those between 8 a.m. and 6 p.m., but a restriction is not placed on the rate of interest charged.

The following table shows the principal licenses issued in the five years 1932 to 1936:—

Occupation.	1932.	1933.	1934.	1935.	1936.
Auctioneers—General ... ..	220	227	232	225	240
District ... ..	1,344	1,273	1,422	1,433	1,494
Billiard ... ..	530	516	507	405	375
Tobacco ... ..	19,617	20,090	20,511	21,458	21,466
Pawnbrokers ... ..	92	89	88	88	88
Hawkers and Pedlars ... ..	2,890	2,886	2,559	2,520	2,247
Collectors ... ..	2,543	2,611	2,428	2,342	2,255
Second-hand Dealers ... ..	1,326	1,353	1,338	1,386	1,338
Sunday Trading ... ..	10,759	11,178	11,341	11,875	11,750
Fishermen ... ..	3,091	2,849	2,843	3,172	3,171
Fishing Boats ... ..	1,572	1,534	1,681	1,803	1,943
Oyster Vendors ... ..	315	307	274	332	456
Pistol Licenses (ordinary) ... ..	18,559	15,888	15,215	14,566	14,531
„ (special) ... ..	411	316	286	282	270
Pistol Dealers ... ..	95	94	72	67	57

A law was enacted in 1927 with the object of preventing the improper use of such drugs as opium, morphine, and cocaine. Registered medical practitioners, pharmacists, dentists, etc., are authorised generally to use the drugs in the conduct of their profession or business, but other persons must obtain a license to manufacture, distribute, or have possession of them. Particulars of these licenses are shown on page 216.

### STATUS OF WOMEN.

In New South Wales women have the right to exercise the franchise and sex does not disqualify any person from acting as member of the Legislative Assembly, as member of a council of any shire or municipality, as judge, magistrate, barrister, solicitor, or conveyancer, or as member of the Legislative Council. Many women have been appointed justices of the peace, and some have been admitted to the practice of the legal profession. They are eligible for all degrees at the University of Sydney, but are not usually ordained as ministers of religion. Women may not act on juries.

The employment of married women in the teaching service of the State has been restricted by law since 1932, but they may be appointed to the service where there are special circumstances.

Nearly 15 per cent. of the members of registered trade unions are women, though there are few unions composed entirely of women. The employment of women in factories and shops is regulated specially by the Factories and Shops Act which limits the continuous employment of women to five hours, restricts the time they may be employed in excess of forty-eight hours per week and between 6 p.m. and 6 a.m., also the weight they may be allowed or required to lift, and prohibits the employment of girls under 18 years of age in certain dangerous occupations. Irrespective of the obligations imposed on employers by industrial awards and agreements, the employment of workers without remuneration in factories and shops is prohibited by the Act.

A separate living wage for women employees is determined by the Industrial Commission of New South Wales at 54 per cent. of the living

wage for male employees. Matters which may be determined by the industrial tribunals include claims that the same wage be paid to men and women performing the same work, or producing the same return of profit or value to their employer.

A legal age of marriage has not been defined, but the average age at which women marry is about 24 years. The consent of a parent or guardian or in the absence of such consent, of a Court or Magistrate, is necessary to validate the marriage of minors. The wife of a British subject is deemed to be a British subject throughout Australia. Under the Married Women's Property Act, 1901, a married woman is capable of holding, acquiring, or disposing of any real or personal property as her separate property in the same manner as if she were a *femme sole*. Her property is not liable for her husband's debts, and her earnings in any occupation apart from her husband's are her own. A wife, however, has no legal share of her husband's income, nor in any property acquired by their joint efforts after marriage, but the husband is liable for all necessary expenses of his wife and children.

### RELIGIONS.

In New South Wales there is no established church, and freedom of worship is accorded to all religious denominations.

The numbers of adherents of the principal religions, as disclosed by the census records, is shown in the following statement:—

Religion.	Number of Persons.			Proportion per cent.		
	1911.	1921.	1933.	1911.	1921.	1933.
<b>Christian—</b>						
Church of England ...	734,000	1,027,410	1,143,493	45.46	49.60	49.63
Roman Catholic† ...	412,013	502,815	556,106	25.54	24.27	24.14
Methodist ...	151,274	181,977	203,042	9.37	8.79	8.81
Presbyterian ...	182,911	219,932	257,522	11.33	10.62	11.18
Congregational ...	22,655	22,235	20,274	1.40	1.07	.88
Baptist ...	20,679	24,722	29,981	1.28	1.19	1.31
Lutheran ...	7,087	5,031	5,956	.44	.24	.26
Unitarian ...	844	622	345	.05	.03	.01
Salvation Army ...	7,413	9,490	9,610	.46	.46	.42
Other Christian ...	55,453	48,963	56,560	3.44	2.37	2.45
<b>Total, Christians ...</b>	<b>1,594,329</b>	<b>2,043,197</b>	<b>2,282,889</b>	<b>98.77</b>	<b>98.64</b>	<b>99.09</b>
<b>Other—</b>						
Jews, Hebrew ...	7,660	10,150	10,305	.47	.49	.45
Buddhist, Confucian, Mohammedan, Hindu, etc.	5,113	4,472	1,823	.32	.22	.08
Indefinite, No Religion ...	7,163	13,572	8,796	.44	.65	.38
Object to State ...	21,986	12,946	297,034	...	...	...
Unspecified ...	10,483	16,034				
<b>Total, New South Wales</b>	<b>1,646,734</b>	<b>2,100,371</b>	<b>2,600,847</b>	<b>100</b>	<b>100</b>	<b>100</b>

† Includes Catholic, undefined, 36,662 in 1911, 20,240 in 1921, and 66,943 in 1933.

The figures for 1933 are not satisfactory for comparative purposes owing to the large number of cases in which "no reply" was recorded. This may be attributed to the fact that the option of refraining from making a statement as to religion was very clearly indicated in the form of return to be completed, whereas in 1921 the householder was requested to complete the schedule in this respect.

## EDUCATION.

IN New South Wales there is a State system of national education which embraces primary, secondary, and technical education, and there are numerous private educational institutions, of which the majority are conducted under the auspices of the religious denominations. The University of Sydney is maintained partly by State endowment and partly by moneys derived from private sources.

The Public Instruction Act of 1880, as amended by the Free Education Act, 1906, the Bursary Endowment Act, 1912, and the Public Instruction (Amendment) Acts of 1916 and 1917, and the Public Instruction and University (Amendment) Act, 1936, is the statutory basis of the State system. This system aims at making education secular, free and compulsory, each of these principles being enjoined by statute. The Act of 1880 provides that "the teaching shall be strictly non-sectarian, but the words secular instruction" shall be held to include general religious teaching as distinguished from dogmatical or polemical theology." General religious instruction is given by teachers, and special religious instruction for limited periods, with the consent of parents, by ministers of religion. Education in both State primary and secondary schools is free.

Attendance at school is compulsory for children between the ages of 7 and 14 years.

The State system is subject to central guidance and control, being administered by a responsible Minister of the Crown, through a permanent Director of Education, who has the assistance of an Advisory Council on Education, which was appointed during 1934. Practically the whole of the State expenditure on education is provided by appropriation from the Consolidated Revenue Fund, but part of the expenditure on buildings, additions, and renewals has been defrayed from loan and other funds.

Private schools are not endowed by the State, but, with few exceptions, are subject to State inspection. Private schools attended by children of statutory school age must be certified as efficient and those at which State bursars are enrolled must be registered. The fact that the school examinations, which mark the various stages of primary and secondary education, are based on the curricula of the State system tends towards uniformity in the teaching of the subjects covered by the examinations.

The school medical service organised by the State for the benefit of children attending both State and private schools, and the school for backward children at Glenfield are described in the chapter dealing with Social Condition.

The complete scheme of education provides a direct avenue from Kindergarten to University. In the State schools kindergarten classes are conducted under the Montessori method. Many private schools make provision for kindergarten, and an organisation known as the Kindergarten Union of New South Wales conducts a school for training in Froebelian methods, and maintains free kindergarten schools and playgrounds in the more congested parts of the metropolitan area.

The course in the primary schools supplies education of a general character in such subjects as English, mathematics, nature knowledge, civics and morals, art and manual work. Beyond the primary stage, the courses diverge into super-primary and secondary education. The former is of a pre-vocational type combining general education with practical subjects suitable for pupils who intend to enter industrial occupations or, in the case of girls, to engage in domestic duties. Secondary education is provided at

district and high schools. The full course extends over five years and prepares pupils for admission to the professions and to the University or other institutions providing tertiary education. Shorter courses are provided for those likely to leave school at an earlier age.

Preparatory education for commercial pursuits is provided at commercial schools and at secondary schools where economics, shorthand and business principles and practice are included in the curriculum. At the University there are degree courses in economics, and diploma courses in commerce and public administration.

Industrial training, commenced in the form of manual training in the primary course, may be continued at super-primary or day continuation schools, and at the trades schools and technical colleges. Training in domestic subjects is a feature of the schools for girls, advanced courses being provided at the schools under the technical system. At the University there is a school of domestic science.

Special attention is directed towards education in subjects pertaining to rural industries. A system of junior farmers' clubs has been inaugurated in the country districts, and assistance has been given to the movement by the appointment of advisory committees and supervisory teachers of school agriculture. At the end of 1936 there were 331 clubs with 7,171 members, of whom 5,085 were public school pupils.

Definite courses in agricultural science and practice and allied subjects are given at district rural schools, at the agricultural high schools at Glenfield and Yanco, and at certain other high, intermediate high and public schools.

The school at Glenfield is known as the Hurlstone Agricultural High School. Its grounds comprise 220 acres and those at Yanco 750 acres. Yanco takes resident pupils only, while Hurlstone makes provision for both resident and day pupils. The course at each school extends over five years, with an examination for the intermediate certificate at the end of three years, and for the leaving certificate at the conclusion of the course. Successful candidates at the intermediate certificate examination, under certain conditions, may gain entrance to the Hawkesbury Agricultural College; those successful at the examination for the leaving certificate may qualify for matriculation in one of the faculties of science, agriculture and veterinary science at the University or compete for scholarships at the Sydney Teachers' College.

The School Forests Areas Act passed in 1935-36 enables areas up to 30 acres or more to be reserved for small scale afforestation work by schools. The Act gives to the schools concerned a permanence of tenure of the reserved areas and assures to them an interest in any special benefits that may accrue as a result of their efforts.

Advanced training in agriculture, dairying, etc., is provided for farmers and students at the Hawkesbury Agricultural College and at experiment farms in various districts.

The final stages of education for rural pursuits are reached at the University, where there are degree courses in agriculture and veterinary science.

#### ADVISORY COUNCIL ON EDUCATION.

During 1934 the Minister for Education, with Cabinet approval, created an Advisory Council on Education, which has been given legislative status by the Public Instruction and University (Amendment) Act, 1936. The

functions of the Council are to report on such matters connected with public education as may be referred to it by the Minister for Education, to advise him on matters connected with public education in the State, and to furnish a report to Parliament annually. The Council consists of the following members:—The Vice-Chancellor of the University of Sydney, the members of the Board of Secondary School Studies, one representative of each Technical Education Advisory Council, the President of the New South Wales Public School Teachers' Federation, the Director of the State Conservatorium of Music, the Apprenticeship Commissioner, and ten members appointed by the Governor, of whom two will be selected to represent trade unions of employees and one to represent Roman Catholic schools. The Council first met on 27th November, 1934.

#### BOARD OF SECONDARY SCHOOL STUDIES.

The Public Instruction and University (Amendment) Act, 1936, provides for the constitution of a Board of Secondary School Studies to replace the present Board of Examiners. It will be composed of five members nominated by the University of Sydney; the Director of Education, the Chief Inspector of Schools, the Superintendent of Technical Education, and two other officers of the Department of Public Instruction; one principal teacher of secondary schools (other than Roman Catholic Schools) registered under the Bursary Endowment Act; one representative of Roman Catholic secondary schools similarly registered; and one headmaster and one headmistress of the State secondary schools. The Director of Education and the Chief Inspector of Schools will act respectively as Chairman and Deputy-Chairman of the Board.

Its duties and functions will be to advise the Minister for Education on matters concerning the examinations for the leaving and higher leaving certificates and the award of such certificates; to arrange and regulate the conduct of these examinations; to determine the course of study to be followed in secondary schools by candidates for these certificates; and to appoint for each subject of the curriculum special committees for the purpose of recommending to the Board the content of any such course of study. The Board will also exercise such other powers, functions and duties as may be prescribed by regulations under the Act.

#### PARENTS AND CITIZENS' ASSOCIATIONS AND DISTRICT COUNCILS.

The Public Instruction and University (Amendment) Act, 1936, provides for the constitution of parents and citizens' associations and kindred organisations in connection with State schools. These organisations have for their objects the promotion of the interests of the local schools by bringing the parents, citizens, teachers and pupils into close co-operation; the promotion of the welfare of the pupils; and the provision of school equipment. Their functions are to assist and co-operate with the teaching staff in public functions associated with the school; to report, when required, upon matters in connection with the school, *e.g.*, additions to school buildings; to help in arranging the conveyance of children attending school; and to assist in such other matters as their co-operation may be desired.

The Act also provides for the formation of district councils in proclaimed areas. A council will be composed of two representatives of each parents and citizens' association within its district. It will advise the Minister for Education on certain school matters, and in connection with the State schools within its district will assist in raising funds for the establishment and maintenance of scholarships, in the foundation and maintenance of central libraries, and in the arrangement and supervision of contracts for the conveyance of children to school.

Parents and citizens' associations have been functioning for some years, and have now been given official status by the Act. The sphere of their usefulness will also be extended by the creation of the district councils referred to above.

#### RESEARCH AND EDUCATIONAL GUIDANCE.

An intelligence test was made in 1936 of all candidates at the High School Entrance examination. Its purpose was to ascertain the distribution of ability among school children and to obtain data which would enable high school teachers to estimate the capacity of new entrants to their schools.

The whole of the sixth class pupils in the Canterbury-Bankstown district were also given ability and intelligence tests. The results were recorded and used by school counsellors, specially qualified officers appointed from the teaching staff, as a guide in advising pupils and parents in the selection of a suitable type of secondary school. Similar work has been carried out in the Goulburn district and at Canberra. A district advisory committee and school counsellor co-operated in similar work at Gosford.

#### CENTRAL ADVISORY COMMITTEE.

A Central Advisory Committee was constituted in 1935 to co-operate with teachers in connection with the guidance of pupils into suitable branches of employment in which there might be vacancies. It includes representatives of the Departments of Education and Labour and Industry, the Chamber of Commerce, the Chamber of Manufactures, and parents.

#### EDUCATIONAL BROADCASTING.

The Educational Broadcasts Advisory Council, composed of representatives of the Broadcasting Commission, the Department of Education, the University Extension Board, and of other educational bodies, was formed on 15th March, 1933, and has functioned since. Committees of the Council organise appropriate adult education and school broadcasts. The first school broadcast was made on 30th May, 1933. Programmes are prepared for each school term, and treat subjects within the school curriculum.

#### REPORT BY THE MINISTER FOR EDUCATION ON VARIOUS ASPECTS OF EDUCATION.

The report of the Minister for Education published in the early part of 1937 gives an account of inquiries made by him on a recent trip abroad into the various aspects of education. The field covered embraces education generally, with special reference to technical education, aviation, and child welfare. Such a wide range of subjects is included that it is impossible to give here an adequate synopsis of the matter of the report and of the Minister's recommendations; the reader is accordingly referred to the report itself, copies of which may be obtained from the Department of Education, Sydney.

#### CENSUS RECORDS.

Particulars of the numbers of persons who had acquired the rudiments of education (reading and writing) as recorded at the censuses of 1901, 1911, and 1921 are shown in the Year Book for 1922 at pages 148-150. Similar information was not collected at the Census taken in 1933.

An indication that illiteracy is unusual in New South Wales may be deduced from the fact that there are few mark signatures in the marriage registers. The numbers in 1935 and in 1936 represented less than 2 per 1,000 persons married.

The persons receiving instruction at the date of each census were distributed as follows:—

Receiving Instruction at—	1901.	1911.	1921.	1933.		
				Males.	Females.	Total.
State School ... ..	198,019	205,769	291,365	188,200	169,914	358,114
Private School ... ..	69,847	59,203	77,553	47,023	52,107	99,130
University ... ..	310	933	2,934	2,307	783	3,090
Home ... ..	16,520	10,147	13,181	6,581	6,858	13,439
School not Stated ... ..	8,357	9,903	33,574	*	*	*
<b>Total ... ..</b>	<b>293,053</b>	<b>285,955</b>	<b>418,607</b>	<b>244,111</b>	<b>229,662</b>	<b>473,773</b>
<b>Proportion per cent. of Population receiving Instruction ...</b>	<b>21·6</b>	<b>17·4</b>	<b>19·8</b>	<b>18·5</b>	<b>17·9</b>	<b>18·2</b>

\* No figures are available under the heading "School not stated," any such persons having been included with those "Not at School."

#### SCHOOLS AND TEACHING STAFFS.

The following table shows the total number of public and private schools in operation at the end of 1901, 1911, 1921, 1931, and each of the past five years, and the aggregate teaching staff in each group. The figures in this table, and in the subsequent tables relating to public and private schools, include secondary schools, but are exclusive of evening continuation schools, technical colleges and trade schools, free kindergarten and other schools maintained by charitable organisations, shorthand and business colleges, etc.

Year.	Schools.			Teaching Staffs.								
	Public. *	Private.	Total.	In Public Schools.*			In Private Schools.			Grand Total.		
				Men.	Women.	Total.	Men.	Women.	Total.			
1901	2,741	890	3,631	2,829	2,318	5,147	337	2,303	2,640	7,787		
1911	3,107	757	3,864	3,165	3,034	6,199	366	2,262	2,628	8,827		
1921	3,170	677	3,847	3,554	5,118	8,672	465	2,463	2,928	11,600		
1931	3,195	733	3,928	4,940	6,641	11,581	630	2,863	3,493	15,074		
1932	3,307	746	4,053	5,004	6,497	11,501	644	2,850	3,494	14,995		
1933	3,399	751	4,150	5,123	6,470	11,593	661	2,884	3,545	15,138		
1934	3,423	755	4,178	5,253	6,293	11,546	674	2,928	3,602	15,148		
1935	3,427	746	4,173	5,502	6,132	11,634	668	2,852	3,520	15,154		
1936	3,416	740	4,156	5,596	6,068	11,664	694	2,846	3,540	15,204		

\* Including subsidised schools.

The number of teachers in public schools, as shown above, is exclusive of students in training, who numbered 681 in 1935 and 993 in 1936. In the case of private schools, visiting or part-time teachers, viz., 323 men and 897 women in 1935, and 315 men and 931 women in 1936, are excluded, as some of them attended more than one school and were included in more than one return.

In the State schools the men employed as teachers outnumbered the women until 1912, but the proportion of men in 1936 was only 48 per cent. of the total. In the private schools the proportion of men teachers has always been small, and in 1936 it was approximately 20 per cent. of the full time teaching staff.

## SCHOOL PUPILS.

A comparative review of the enrolment of children at public and private schools is restricted to the last term in each year, as the figures in regard to private schools in the earlier years are available for that period only. The following statement shows the enrolment during the December term at all schools and colleges in the State, primary and secondary, other than evening continuation, charitable, and free kindergarten schools and technical, trade, and business schools and colleges\* :—

Year.	Public Schools.†			Private Schools.			Total Enrolment.	Proportion of Scholars Enrolled.	
	Boys.	Girls.	Total.	Boys.	Girls.	Total.		Public Schools.	Private Schools.
								per cent.	per cent.
1901	110,971	99,617	210,588	27,163	33,674	60,837	271,425	77.6	22.4
1911	116,317	105,493	221,810	26,962	34,588	61,550	283,360	78.3	21.7
1921	163,699	151,529	315,228	35,903	42,557	78,460	393,688	80.1	19.9
1931	202,873	185,008	387,881	42,982	49,303	92,285	480,166	80.8	19.2
1932	201,443	183,332	384,775	44,168	49,112	93,280	478,055	80.5	19.5
1933	199,773	182,631	382,404	44,818	49,628	94,446	476,850	80.2	19.8
1934	199,819	182,822	382,641	45,558	50,291	95,849	478,490	80.0	20.0
1935	198,247	182,363	380,610	46,332	50,634	96,966	477,576	79.7	20.3
1936	196,591	181,124	377,715	47,309	51,764	99,073	476,788	79.2	20.8

\* The numbers of pupils so excluded in 1935 and 1936 respectively were: —Evening continuation, about 4,500 and about 4,400; schools for deaf mutes, etc., 269 and 375, private charitable, 1,335 and 1,384; free kindergarten, 1,231 and 1,152; technical colleges and trade schools 19,959 and 21,364; business colleges and shorthand schools, about 12,000 and about 13,000.

†Including Subsidised Schools.

Since 1901 the enrolment in public schools has increased by 79.4 per cent., while in the private schools it has risen by only 62.8 per cent., so that the proportion of children in public schools has advanced from 77.6 per cent. to 79.2 per cent. In the public schools there are more boys than girls, the proportion being boys 52 per cent. and girls 48 per cent. In the private schools girls are in the majority, representing 52.2 per cent. of the enrolment.

Considering only children for whom education is compulsory, viz., between 7 and 14 years, the following table shows the numbers and proportions taught in public and private schools, based on the enrolment in December term, omitting private institutional schools and free kindergartens :—

Year.	Public Schools.	Private Schools.	Total.	Proportion.	
				Public Schools.	Private Schools.
				per cent.	per cent.
1921	246,136	53,664	299,800	82.1	17.9
1929	282,517	60,441	342,958	82.4	17.6
1930	285,856	60,241	346,097	82.6	17.4
1931	288,730	61,395	350,125	82.5	17.5
1932	291,559	61,918	353,477	82.5	17.5
1933	292,362	63,361	355,723	82.2	17.8
1934	290,724	65,281	356,005	81.7	18.3
1935	288,818	65,859	354,677	81.4	18.6
1936	286,525	66,387	352,912	81.2	18.8

In December term 1936, 23.8 per cent. of the pupils under 7 years of age and 29.9 per cent. of those over 14 years were enrolled at private schools, the proportion in both groups being much greater than the proportion at statutory ages, viz., 18.8 per cent.

An explanation of the decrease in the enrolment of school children generally and of children of statutory school age particularly is found in the diminishing number of births, which is offset to some extent by an improvement in the mortality rate, which, however, cannot continue indefinitely. Based on births only (*i.e.*, without allowance being made for deaths and migration), it has been estimated that children of statutory school age would number 374,877 in 1937, with a decline each subsequent year. Thus in 1942, the year in which the influence of the birth rate during the period of economic depression (1929-1935) would become apparent, the number would be 329,643. Survivals to school age (*i.e.*, the excess of births over deaths for this group) at the close of each of the last five years were: 1932—340,925; 1933—346,324; 1934—347,003; 1935—347,685; and 1936—345,336. These figures would seem to indicate that the peak enrolment was reached in 1935; actually it was reached in 1934, as is disclosed in the table above. The influence of migration on the school population has not been taken into account, as particulars of arrivals from and departures to other States and countries are not available in age groups. The effect of economic conditions on the enrolment of children over school age is discussed on page 279.

#### CHILDREN RECEIVING EDUCATION.

It is probable that a considerable number of children between the ages of 7 and 14 years, when education is compulsory, are not enrolled in schools for the whole of those years, although they may attend school for most of the statutory period. The children not enrolled in schools include those receiving instruction at home (numbering 13,439 at the Census of 1933), those exempt from further attendance for special reasons on attaining the age of 13 years, and those who are inaccessible to schools or who are mentally or physically deficient. The institution of a system of teaching isolated pupils by correspondence, the provision of facilities for conveyance, and of subsidies for private teachers of small rural schools, tend to reduce the number of children not otherwise reached by the education system.

It has been estimated that the average weekly enrolment at State and private schools represents more than 90 per cent. of the children "requiring education," *i.e.* the children of statutory school age and those of other ages enrolled.

The following comparison indicates the degree of regularity of attendance among children enrolled at State and private schools:—

Year.	Public Schools.			Private Schools.		
	Average Weekly Enrolment.	Average Daily Attendance.	Ratio of Attendance to Enrolment.	Average Weekly Enrolment.	Average Daily Attendance.	Ratio of Attendance to Enrolment.
			per cent.			per cent.
1911	203,385	160,776	79.0	*	52,122	*
1921	292,264	248,605	85.1	74,206	64,172	86.4
1931	386,378	322,816	88.1	87,190	78,435	90.0
1932	363,968	322,899	88.7	88,557	79,948	90.3
1933	361,322	316,404	87.6	91,040	80,282	88.2
1934	360,188	309,953	86.1	91,124	80,407	88.2
1935	359,269	310,894	86.5	92,750	81,144	87.5
1936	353,870	310,450	87.7	94,409	83,210	88.1

\* Not available.

The proportion of attendance to enrolment signifies that on the average children attend less than four and a half days in a school week of five days. The ratio of attendance has increased slightly since 1921.

The attendance of children at school is affected adversely by infectious and contagious diseases, and—particularly in country districts where transport facilities are lacking—by inclement weather. The attendance of boys is slightly more regular than that of girls.

#### *Age Distribution of Pupils.*

The following table shows the age distribution of pupils enrolled at schools during 1921, 1931 and the last five years. The figures represent the gross enrolment during December term at primary and secondary schools, omitting those enumerated at the foot of the first table on page 277.

Year.	Public Schools.				Private Schools.			
	Under 7 years.	7 years and under 14.	14 years and over.	Total.	Under 7 years.	7 years and under 14.	14 years and over.	Total.
1921	41,938	246,136	27,154	315,228	12,622	53,664	12,174	78,460
1931	53,120	288,730	46,031	387,881	15,315	61,395	15,575	92,285
1932	49,593	291,559	43,618	384,775	16,187	61,918	15,175	93,280
1933	51,273	292,362	38,769	382,404	16,658	63,361	14,427	94,446
1934	54,397	290,724	37,520	382,641	16,554	65,281	14,014	95,849
1935	54,437	288,818	37,355	380,610	16,796	65,859	14,311	96,966
1936	54,098	286,525	37,092	377,715	16,889	66,387	15,797	99,073

In 1936 there were enrolled 70,987 children below the statutory school age, viz., 35,881 boys and 35,106 girls; and 52,889 were 14 years of age and over, of whom 28,397 were boys.

It is evident that owing to lack of employment there was a large increase in the enrolment of children over school age during the period 1929 to 1933, particularly in public schools, the number in 1933 being higher by 2,662 or 5 per cent., than in 1929. The improvement in the economic condition of the State is reflected in the lesser number of pupils enrolled in this group at the close of 1936, especially in public schools, the decrease as compared with 1931, when enrolment in this group was greatest, amounting to approximately 8,700. Enrolment of children under school age remained practically unchanged during 1936, while that of children of school age showed a decrease of 1,765 as compared with 1935.

More details as to the ages of children attending public primary schools may be obtained from a table published annually in the report of the Minister of Public Instruction, which shows the ages of children in the various school classes.

#### *Religions.*

Particulars of the religion of each child attending a State school are obtained upon enrolment, but such information is not available regarding pupils of private schools. Any analysis of the religions of school pupils is

restricted, therefore, to a comparison of the number of children of each denomination enrolled at public schools, and the number of children (irrespective of religion) attending schools conducted under the auspices of the various religious denominations.

Such a comparative review of the aggregate enrolment in primary and secondary schools (omitting those enumerated at the foot of the first table on page 277 during the December term of various years is given below. The figures, being on the same basis of comparison for each year, illustrate the progress of each main type of denominational school during the period:—

Year.	Public Schools— Denomination of Children Enrolled.					Private Schools— Denomination of Schools.			
	Church of England.	Roman Catholic.	Presby- terian.	Methodist.	Other.	Church of England.	Roman Catholic.	Undenom- inational.	Other.
1901	109,876	31,054	23,511	24,971	21,176	3,966	41,483	13,546	1,839
1911	118,794	31,044	26,347	30,595	15,030	3,297	46,037	10,141	2,015
1921	176,998	35,532	37,497	44,210	20,991	5,265	63,060	8,131	2,304
1931	218,333	42,590	49,200	51,244	26,514	5,335	78,287	6,104	2,579
1932	216,169	41,986	48,704	51,023	26,893	4,761	79,760	6,063	2,696
1933	215,387	40,749	48,440	50,613	27,215	4,753	80,742	6,221	2,730
1934	215,546	41,124	48,367	50,234	27,370	4,885	82,101	6,114	2,749
1935	214,672	41,039	47,700	49,764	27,435	4,861	82,979	6,164	2,962
1936	213,216	41,202	47,043	49,295	26,959	5,159	84,095	6,303	3,516

*Proportion Per Cent. of Total Number of Pupils Enrolled in all Schools.*

1901	40.5	11.4	8.7	9.2	7.8	1.5	15.3	5.0	0.6
1911	41.9	10.9	9.3	10.8	5.3	1.2	16.3	3.6	0.7
1921	45.0	9.0	9.5	11.2	5.3	1.4	16.0	2.1	0.5
1931	45.5	8.9	10.2	10.7	5.5	1.1	16.3	1.3	0.5
1932	45.2	8.8	10.2	10.7	5.6	1.0	16.7	1.3	0.5
1933	45.2	8.5	10.2	10.6	5.7	1.0	16.9	1.3	0.6
1934	45.0	8.6	10.1	10.5	5.7	1.0	17.2	1.3	0.6
1935	45.0	8.6	10.0	10.4	5.7	1.0	17.4	1.3	0.6
1936	44.7	8.6	9.9	10.3	5.7	1.1	17.7	1.3	0.7

Of the total enrolment in State schools, children of the Church of England constituted 53.5 per cent. in 1911 and 56.1 per cent. in 1921, but the proportion has varied only slightly since, being 56.4 per cent. in 1936. Children of the Roman Catholic faith attending State schools represented 14 per cent. of the total in 1911, but the proportion fell to 11.3 per cent. in 1921, and has declined gradually since, until in 1936 it was 10.9 per cent. Of the total enrolment in private schools children attending Roman Catholic schools constituted 80.4 per cent. in 1921, and the proportion increased to 84.9 per cent. in 1936.

The enrolment at undenominational private schools has diminished considerably since 1901.

*Religious Instruction in State Schools.*

The Public Instruction Act, 1880, provides that religious instruction may be given in State schools by visiting ministers and teachers of religious bodies for a maximum period of one hour in each school day, and the

following table indicates the number of lessons in special religious instruction given in public schools during the past five years by representatives of the various denominations:—

Denomination.	Number of Lessons.				
	1932.	1933.	1934.	1935.	1936.
Church of England ... ..	54,405	55,599	56,268	54,977	62,731
Roman Catholic ... ..	6,953	6,041	6,636	8,617	17,514
Presbyterian ... ..	19,743	20,953	20,490	19,308	22,524
Methodist ... ..	25,442	25,961	25,143	24,120	28,551
Other Denominations ... ..	16,476	16,341	16,313	15,904	18,855
Total ... ..	123,019	124,895	124,850	122,926	150,205

#### SCHOOL SAVINGS BANKS.

A system of school savings banks in connection with State schools was commenced in the year 1837 with the object of inculcating principles of thrift amongst the children. The system was extended later to private schools. Deposits are received by the teachers, and an account for each depositor is opened at the local branch or agency of the savings bank.

At 30th June, 1936, there were 2,622 school savings banks with 168,901 depositors. The corresponding figures at 30th June, 1937, were 2,746 banks and 181,187 depositors.

Deposits and withdrawals during 1936-37 amounted to £161,418 and £134,752 respectively, £3,107 was added as interest, and the balance to credit of accounts at 30th June, 1937, was £259,131.

#### STATE SCHOOLS.

The following table affords a comparison between the numbers of the various types of State schools in operation at the end of 1881, the first full year in which the Department of Education was under ministerial control, and the numbers open at later periods:—

Type of School.	Schools at end of year.					
	1881.	1901.	1921.	1931.	1935.	1936.
<b>Primary Schools—</b>						
Public ... ..	1,007	1,874	2,020	2,029	1,992	1,978
Provisional ... ..	227	398	477	599	592	604
Half-time ... ..	83*	414	90	38	28	30
House-to-house and Travel- ling ... ..	...	17	3	1	1	1
Correspondence ... ..	...	...	4	1	1	1
Subsidised ... ..	...	...	546	486	771	759
Evening ... ..	33	34	...	...	...	...
Industrial and Reformatory...	2	4	3	3	2	1
Total—Primary ... ..	1,352	2,741	3,143	3,157	3,387	3,374
<b>Secondary Schools—</b>						
High ... ..	...	4	27	38	140	142
Intermediate High ... ..	...	...	25	54	54	50
District ... ..	...	...	13	6	4	4
<b>Continuation Schools—</b>						
Commercial ... ..	...	...	15	16	16	16
Junior Technical ... ..	...	...	26	32	25	26
Domestic ... ..	...	...	46	53	35	36
Evening ... ..	...	...	46	45	36	36
Rural Schools ... ..	...	...	...	14	14	14
Composite† ... ..	58	113	57	461	516	562
Total—Secondary and Continuation Schools	58	117	255	719	740	786

\* Including Third-time Schools.

† Superior Public Schools.

‡ Excludes 2 annexes in 1935 and one in 1936.

The number of individual schools at the end of 1936 was 3,452, which is less than the foregoing figures indicate, owing to the fact that with the exception of high schools the majority of secondary schools are conducted in conjunction with primary schools.

It is the policy of the State educational authorities to meet as far as practicable the demand for post primary education. For this purpose composite courses have been arranged in a number of primary schools, and super-primary courses are conducted by the correspondence school. The figures in the table are exclusive of a number of small country schools where, by means of lesson sheets and with the assistance of the teacher, pupils may secure a year's course of super-primary instruction.

### *State Primary Schools.*

Primary work in its various stages is undertaken in State schools classified broadly into three groups,—(a) Primary schools in more or less populous centres; (b) schools in isolated and sparsely-settled districts, viz., provisional, half-time, subsidised schools, and one travelling school, and (c) a correspondence school instructing children so isolated as to be unable to attend school.

A public school may be established in any locality where the attendance of twenty children is assured. In most schools boys and girls are taught together, but schools with an average attendance of 360 pupils are divided into two departments, and those with an attendance exceeding 600 into three departments, viz., boys, girls, and infants.

The infants' course extends over a period of two years. The primary course is usually completed when the pupil is about 12½ years of age.

Provisional schools are maintained where there is an average attendance of ten pupils and where doubt exists as to the permanence of the settlement. At the end of 1936 there were 604 such schools in operation, with an effective enrolment of 11,169, an increase of 12 schools and a decrease of 149 scholars compared with the preceding year.

Half-time schools are established where a number of children sufficient to maintain a minimum attendance of ten pupils can be collected in two groups, not more than 10 miles apart. One teacher divides his time between the two groups, so arranging that home-work and preparatory study shall occupy the time of each pupil in his absence from either school.

There were thirty half-time schools at the end of 1936, and the number of pupils enrolled was 234. The course of instruction in provisional and half-time schools follows the course of full-time schools.

There is one travelling school which visits localities where families are so isolated that they cannot combine readily for the education of the children. The teacher is provided with a vehicle to carry school requisites, and a tent for use as a schoolroom, in which to teach for a week at a time at each centre in his circuit. Formerly there were more travelling schools, but in recent years teaching by correspondence has been developed as a more satisfactory method of educating children in isolated localities.

In 1932 special classes were inaugurated for pupils of superior ability, and the scheme has been extended since. Pupils are selected by means of scholastic and intelligence tests, and are grouped under special teachers at a central school. They are given work commensurate with their ability and so are enabled to enjoy a broader and enriched curriculum which cannot be provided in classes where children of varying ability are grouped together. There were four such schools at the close of 1936.

*Subsidised Schools.*

Subsidised schools are formed for the benefit of families in remote districts where there is a single family with at least three children of school age or where two or more families combine to engage a teacher. The teacher is selected with the approval of the Department of Education, from whom he receives an annual subsidy, in addition to the salary paid by the parents. Subsidies are granted only in the cases of teachers of children resident in sparsely populated districts so far removed from any public school that school attendance is impracticable. In the eastern portion of the State subsidy is at a minimum rate of £30 per annum, increasing according to the average monthly attendance, to a maximum of £110 per annum. Elsewhere the minimum and maximum rates are £33 and £120 per annum respectively. The course is as far as practicable the same as in primary schools, and a post-primary course may be given by means of leaflets issued by the correspondence school. The subsidised schools are subject to inspection by the State school inspectors. The number of subsidised schools in 1936 was 759, with 6,143 pupils on the roll, of whom 1,672 were receiving post-primary instruction by means of leaflets.

*Correspondence School.*

Pupils taught by correspondence are organised as a single school located at Sydney. The primary course is mainly followed, and when completed super-primary instruction to the intermediate standard is given in such subjects as English, history, geography, mathematics, art, business principles, book-keeping, French and Latin. Pupils are not admitted to the school until they reach the age of seven years. There were 150 teachers attached to the school in 1936, and the number of pupils receiving instruction by correspondence was 5,323, in which were included 367 taking the course leading to the intermediate certificate. The corresponding figures for 1935 were 143, 5,287 and 399 respectively. The leaflets for the post-primary instruction of children in small country schools are prepared by the correspondence school.

*Central Schools and Boarding Allowances.*

Small schools are not established where it is convenient to arrange for the daily conveyance of the pupils to a central school. In such cases local committees consisting of parents, the teacher of the central school, and other persons of repute, are required to assume responsibility for arranging and supervising the transport of the children, the cost of conveyance being defrayed by the Department at fixed rates.

Attendance at central schools is also encouraged by means of subsidies paid under certain conditions as an aid towards boarding children with relations or friends in a township for the purpose of attending school. The amounts expended for conveyance and boarding allowances during the years 1935 and 1936 were £16,576 and £20,530 respectively.

*Activity or Handicraft School.*

An Activity or Handicraft school was opened at the beginning of the 1936 school year to provide for pupils whose studies beyond the primary stage require to be of a character different from the usual type. The school is for boys of average intelligence who have failed to make normal progress in their education through illness or interrupted schooling, or whose

interests are not in the direction of academic attainment. The aim of the school is to prevent these boys becoming educational misfits. The curriculum includes general subjects, but a large proportion of the time is devoted to manual work, handicrafts of various kinds, drawing and hobbies. The full course extends over three years.

### *Education of Subnormal Children.*

Education of subnormal children is undertaken by the Department of Education at a special school at Glenfield. At 31st December, 1936, there were 57 boys and 46 girls enrolled.

### *Secondary Education in State Schools.*

The number of pupils receiving secondary education at State schools in 1921 and 1931, and each of the last five years, is shown in the following statement. Particulars relating to evening continuation schools are not included, but are shown later:—

Year.	Secondary Schools.			Super-Primary Courses at Primary Schools.		
	Schools.	Gross Enrolment.	Average Attendance.	Schools.	Effective Enrolment.	Average Attendance.
1921	...	152	26,728	57	1,530	1,281
1931	...	213	66,248	461	4,337	3,616
1932	...	*208	64,977	492	4,836	3,988
1933	...	*201	63,171	537	4,991	4,100
1934	...	†195	62,699	529	4,066	3,348
1935	...	†190	59,179	516	4,018	3,251
1936	...	§189	60,866	562	4,723	4,252

\* Includes 4 annexes.

† Includes 2 annexes.

§ Includes 1 annex.

The secondary schools consist of high, intermediate high, district, continuation and rural schools.

Each high school is a self-contained unit conducted apart from any other type of school, to provide courses of instruction covering five years leading to the higher leaving certificate examination.

Intermediate high and district schools are conducted in the same group of buildings as a primary school and are controlled by the same head master. The courses of instruction cover the first three years of the secondary course leading to the intermediate certificate examination. The courses are for the most part educational only, but the intermediate and leaving certificates are generally accepted as proof of sufficient educational qualification for admission to the Public Service, the teaching profession, banks, and kindred bodies.

At the end of 1936 there were 14 high schools in the metropolitan area (including a technical high school) and 29 in the country districts providing a full course of instruction. There were 50 intermediate high schools, of which 15 were in the metropolis. At most country high schools non-language as well as language courses are in operation, the former including practical subjects in lieu of languages.

The following particulars relate to high schools and intermediate high schools maintained by the State. In addition to the holders of bursaries as shown in the table there were 250 holders of scholarships in 1911. In recent years scholarships have not been awarded, all pupils being supplied with text-books free of cost.

Year.	* High Schools.	Inter- mediate High Schools.	Teachers.			Pupils.			Bursars.
						Enrolment.		Average Daily Attend- ance.	
			M.	F.	Total.	Net.	Average Weekly.		
1901	4	...	16	11	27	676	526	489	†
1911	8	...	59	38	97	2,293	1,864	1,786	201
1921	27	25	349	299	648	14,247	12,199	11,253	1,005
1931	39	54	707	613	1,320	33,229	30,710	28,524	863
1932	42	54	732	576	1,308	35,334	31,499	29,078	770
1933	42	56	772	607	1,379	34,539	30,857	28,340	647
1934	42	54	779	581	1,360	33,957	30,419	27,646	558
1935	42	54	840	577	1,417	34,942	31,172	28,412	516
1936	43	50	850	567	1,417	35,187	31,997	29,443	493

\* Includes 1 annex in 1931, 4 in 1932 and 1933, 2 in 1934 and 1935 and 1 in 1936. † Not available.

Facilities for State secondary education have been expanded greatly since 1911, and during the period 1921 to 1931 the enrolment increased from 14,247 to 33,229, or by almost 134 per cent. In more recent years pupils who would have sought employment under more normal conditions continued their attendance at school, the enrolment in 1932 reaching 35,334. It has fallen since, and in 1936 was 147 less at 35,187.

There were four district schools in 1935 and 1936. All were located in country towns. In 1935 the teachers numbered 13, the net enrolment was 376 and the average attendance 277. Corresponding particulars for 1936 were 16 teachers, net enrolment 349, and average attendance 280.

#### *Day Continuation and Rural Schools.*

Training in commercial subjects is provided in commercial continuation schools and a preparatory course leading to the trade courses under the technical system is given in junior technical (continuation) schools. At these schools boys may continue for a period of three years elementary courses commenced in primary schools in commercial subjects and in manual training respectively. In the junior technical schools the subjects are essentially of a practical nature, viz., technical drawing and workshop practice, English, practical mathematics, history and civics, and elementary science. The courses in English, mathematics, and history are on the same standard as in high schools.

The continuation schools for girls are known as domestic science schools. The syllabus provides for a course commencing at the end of the primary school stage and extending over three years. The course during the first two years is of a domestic and general educational character, embracing English, arithmetic, history, civics, and morals, art and home decoration, botany and practical gardening, needlework, cookery, laundry, home management, hygiene, care of infants and care of the sick. The third year course is of a commercial character and provides for further studies in English and arithmetic, to which is added elementary training in business principles, shorthand and typewriting. At several schools the course has been extended to five years, at the end of which the pupils may sit for the leaving certificate examination.

Candidates successful in the annual domestic science examination may enter upon the home economics course at the Technical College.

Since 1920 there has been a rapid growth in the attendance at super-primary schools of the domestic science type. In that year forty-seven such schools were in operation with a gross enrolment of 4,920 pupils and an average attendance of 2,829. In 1936 the corresponding numbers were thirty-six schools, gross enrolment 13,438, and average daily attendance 11,184. The decrease in the number of these schools is explained by the transfer of girls from super-primary to local high schools in country centres and to central domestic science schools in metropolitan districts.

District rural schools are conducted in conjunction with the primary schools in country centres. At each of these schools super-primary courses are provided extending over a period of three years in general subjects and in elementary agriculture, agricultural nature study, applied farm mechanics, rural economics and horticulture.

The following table provides a comparison of the number of continuation schools and the gross enrolment during each of the last five years:—

Year.	Day Continuation Schools.						Rural Schools.	
	Commercial.		Junior Technical.		Domestic Type.			
	No.	Gross Enrolment.	No.	Gross Enrolment.	No.	Gross Enrolment.	No.	Gross Enrolment.
1932	16	3,420	26	9,845	48	12,885	15	1,890
1933	17	3,778	26	9,179	42	12,445	14	1,737
1934	17	3,567	26	8,927	37	13,050	15	1,726
1935	16	3,335	25	8,583	35	12,708	14	1,662
1936	16	3,040	26	9,104	36	13,438	14	1,663

The average attendance during 1936 was as follows:—Commercial 2,536, junior technical 7,608, domestic 11,184, rural 1,346.

Composite courses are provided at primary schools in country districts where secondary schools are not readily accessible. The courses lead to the intermediate certificate and the Public Service entrance examinations.

Superprimary instruction by means of leaflets is arranged for children attending small country schools who have passed the primary final examination and are prepared to continue their education for at least one year. The subjects of instruction are Latin, English, history, arithmetic, elementary science, business principles and art, and for girls, hygiene and home management. A series of eleven papers comprises a course, and each paper contains sufficient work for one month. This system differs from instruction by correspondence in that the pupil's work is arranged and corrected by the teacher in charge of the school.

#### *Evening Continuation Schools.*

Evening continuation schools have been established for the benefit of pupils who leave school for work at the termination of the primary course. They are organised on the same lines as day continuation schools and provide similar courses adapted to the requirements of students who are able to attend evening classes for only a few hours per week. An evening continuation school may be established in any centre where the number of students who will guarantee to attend for two years is sufficient. Attendance

is encouraged by granting free admission to unemployed pupils and by refunding all fees charged to others whose conduct and attendance have been satisfactory. The average age of the pupils attending the evening continuation schools is 18 years.

The following is the record of the evening continuation schools in the years 1935 and 1936:—

Classification.	1935.			1936.		
	Number of Schools.	Average Weekly Enrolment.	Average Attendance.	Number of Schools.	Average Weekly Enrolment.	Average Attendance.
Junior Technical (Boys)...	13	1,249	933	13	1,308	1,016
Commercial (Boys) ...	13	1,658	1,284	13	1,763	1,396
Domestic (Girls) ...	10	1,231	925	10	1,106	838
<b>Total</b> ...	<b>36</b>	<b>4,138</b>	<b>3,142</b>	<b>36</b>	<b>4,177</b>	<b>3,250</b>

Boys comprised more than 73 per cent. of the pupils enrolled, and enrolment at the commercial schools represented more than 42 per cent. of the total. The ratio of attendance to enrolment for boys and girls was respectively 78.5 and 75.8 per cent. As compared with 1935 there was an improvement both in respect of enrolment and attendance. Thirty-six schools were in operation during 1936, with an average weekly enrolment of 4,177 and an average attendance of 3,250.

#### *Vocational Guidance.*

A vocational guidance bureau was established in 1927 as a part of the State system of education. The bureau makes psychological and physical tests of youths seeking employment, which in conjunction with the school records of their educational attainments serve to indicate the vocations for which they are best suited. The bureau acts in co-operation with employers and has been effective in placing many young people in suitable occupations.

With the development of the economic depression the problem of finding employment for the youths of both sexes became intensified and in 1932 the bureau was transferred to the Department of Labour and Industry and became the Vocational Guidance and Juvenile Employment section of the State Labour Exchanges. Its functions were extended to include vocational training and classes for unemployed youths were organised in the metropolitan area and in the principal country centres. Free travelling facilities are made available to youths in necessitous circumstances attending the classes.

During 1935-36 1,601 boys and 204 girls were tested, advised and registered for employment, 1,906 juveniles were admitted to vocational classes and positions were found for 3,482.

The section selects lads for training on the Scheyville farm and arranges for their subsequent placement in rural employment. During 1936 424 lads were so trained.

Young citizens' associations have been formed under the auspices of the department and of shire and municipal councils to supplement the efforts of the bureau. The functions of these associations are social,

educational and vocational and are co-ordinated by an advisory committee. For the period ended 31st December, 1936, the total enrolment was 17,708, of whom 7,653 were placed in employment by the associations. An employment research committee has also been constituted to explore avenues for increased employment and to consider means of fitting unemployed youths for absorption in industry.

### PRIVATE SCHOOLS.

The position of private schools in the education system of the State has been discussed at the beginning of this chapter.

By virtue of the Public Instruction (Amendment) Act of 1916, children between the ages of 7 and 14 years must be provided with efficient education, and a school is not recognised as efficient unless it is certified by the Minister for Education, who takes into account the standard of instruction, the qualifications of the teachers, the suitability of the school premises, and the general conduct of the school. This provision applies to both primary and secondary schools where children of statutory ages are educated. The conditions upon which benefits under the Bursary Endowment Act are extended to private secondary schools involve a similar inspection and certification, and nearly all of them have been registered by the Department of Education. The standards of instruction required of private schools under both Acts are the same as those of public schools of similar grade and situation.

The total number of private schools certified by the Minister for Education in 1936 was 841. Of these, 557 were certified under the Public Instruction (Amendment) Act of 1916, excluding 106 which were certified for the instruction of children up to a specified age only; 110 secondary schools were registered under the Bursary Endowment Act as efficient to provide the full secondary course; and 68 were recognised officially as qualified for the education of pupils to the Intermediate Certificate stage of the secondary course.

The Roman Catholic schools comprise the largest group of private schools in New South Wales. They are organised on a diocesan basis to provide religious and secular education. A Director of Catholic Education with special qualifications for the work exercises general supervision, and there are religious and secular inspectors in each diocese. In addition to general primary and super-primary education, commercial and domestic courses are provided at the parochial schools, and a number of the schools have been specially equipped for commercial, junior technical, or domestic training. English and commercial classes are conducted also by correspondence. At some of the schools rural training is provided and an agricultural college was opened at Woodlawn, Lismore, in 1931, to give practical education in scientific agriculture, as well as the academic course of a secondary school.

The pupils at the Roman Catholic schools attend the public examinations, described on page 291, also examinations conducted by the diocesan inspectors at the end of the primary and in the intermediate stages. On the results of these examinations scholarships and bursaries are awarded. There are two Roman Catholic colleges for resident students at the University of Sydney. Information relating to the training of teachers for Roman Catholic schools is shown on page 301.

The following table shows particulars of the private schools of each denomination in 1935 and 1936, excluding charitable schools described on page 290.

Classification.	1935.				1936.			
	Schools.	Teachers.	Enrolment December Term.	Average Daily At- tendance.	Schools.	Teachers.	Enrolment December Term.	Average Daily At- tendance.
Udenominational ...	135	423	6,164	5,256	133	414	6,303	5,352
Roman Catholic ...	537	2,595	82,979	68,877	535	2,593	84,095	69,991
Church of England ...	49	323	4,861	4,347	49	333	5,159	4,640
Presbyterian ...	9	95	1,530	1,380	9	88	1,663	1,537
Methodist ...	4	54	905	840	5	60	1,010	946
Lutheran ...	3	3	92	81	3	3	102	92
Seventh Day Adventist	7	21	365	301	9	33	649	565
Congregational ...	1	1	12	10	...	...	...	...
Theosophical ...	...	...	...	...	1	5	29	29
Christian Science ...	1	5	58	52	1	6	63	58
Total ...	746	3,520	96,966	81,144	745	3,540	99,073	83,210

The number of teachers, as shown in the table, does not include those who visit schools to give tuition in special subjects only. It is not possible to ascertain the number of individuals represented by these figures, because the number of teachers who give instruction in more than one school is not recorded.

Fees are usually charged at private schools, but they vary considerably in amount. In some denominational schools the payment of fees is to some extent voluntary, and a number of scholarships and bursaries have been provided by private subscriptions for the assistance of deserving students.

Some of the private schools are residential. In 1935 there were 90,126 day scholars and 6,840 boarders, and in 1936 the numbers were respectively 91,096 and 7,977.

The following statement shows the number of secondary pupils enrolled during the December term in each of the last six years:—

Year.	Schools.	Secondary Pupils Enrolled in Private Schools.		
		Boys.	Girls.	Total
1931	358	8,340	8,050	16,390
1932	365	8,864	8,722	17,586
1933	378	8,933	8,581	17,514
1934	395	8,963	8,976	17,939
1935	364	9,022	8,212	17,234
1936	374	8,547	9,543	18,090

The number of secondary pupils in private schools has shown a considerable increase. The pupils so enumerated are defined as those who follow a course of instruction similar to that laid down in the syllabus for secondary schools by the Department of Education. There are, however, in private schools a considerable number of pupils over 14 years of age not recorded as secondary pupils in the returns supplied. Some of these attend business colleges for commercial education while others follow super-primary courses.

*Private Charitable Schools.*

In addition to the private schools to which the foregoing tables relate, there are schools connected with charitable institutions or organisations, which are certified under the Public Instruction (Amendment) Act of 1916 for the education of children of statutory school age. There were 14 such schools in 1936—13 were under the auspices of the Roman Catholic Church, and one under the Church of England. The gross enrolment at these institutional schools during 1936 was 1,671.

The Kindergarten Union maintains in the city and suburbs 16 free kindergarten schools and playgrounds for children under statutory school age. In 1936 there were enrolled 1,830 scholars, and the average daily attendance was 870. The organisation receives a State subsidy of £1,000 per annum.

The education of deaf, dumb and blind children is undertaken at two schools in connection with the Institution for the Deaf and Dumb and the Blind, which is endowed by the State. At the end of 1936 there were 195 children in the institution. Deaf mutes are trained also at two Roman Catholic institutions, one at Waratah for girls, with 35 inmates at the end of 1936, and the other established at Castle Hill, where 45 boys were enrolled.

The total number of private charitable schools in 1936 was 34, and there were 130 teachers. The gross enrolment during the year was 3,808, and the average daily attendance 2,334. In December term there were 2,811 scholars on the roll, of whom 1,382 were under 7 years of age, 1,254 between 7 and 14 years, and 175 over 14 years.

*Enrolment in Private Schools.*

A comparative statement of the enrolment in private schools (including the schools at private charitable institutions) is shown below. The enrolment at Kindergarten schools and playgrounds is not included.

Year.	Scholars on Roll during December Term.								Total.*
	Un-denominational.	Roman Catholic.	Church of England.	Presbyterian.	Methodist.	Seventh Day Adventist.	Lutheran.	Other Denominations.	
1911 ...	11,097	46,656	3,397	370	311	213	34	...	62,078
1921 ...	8,496†	63,486	5,417	788	605	301	51	163	79,307
1929 ...	7,760	75,311	6,220	1,599	1,074	311	76	50	92,401
1930 ...	7,052†	76,824	6,131	1,592	1,032	292	111	...	93,034
1931 ...	6,339	79,684	5,459	1,235	890	310	105	...	94,022
1932 ...	6,312†	81,135	4,885	1,274	874	314	105	65	94,964
1933 ...	6,467†	82,125	4,863	1,320	868	322	98	59	96,122
1934 ...	6,373†	83,516	5,001	1,365	860	270	93	89	97,567
1935 ...	6,356	84,290	4,962	1,530	905	365	92	70	98,570
1936 ...	6,527†	85,449	5,269	1,663	1,010	649	102	63	100,732

\* Includes schools at private charitable institutions.

† Includes scholars at Theosophical schools.

Between 1911 and 1936 the enrolment in private schools increased by 38,654, or 62.3 per cent. In undenominational schools there has been a marked decline. The enrolment in Roman Catholic schools, which constitute the great majority of the private establishments, has increased by 34.6 per cent. since 1921. Other groups of denominational schools expanded between 1921 and 1929, but in most cases the enrolment has declined since.

## SCHOOL EXAMINATIONS.

To test the proficiency of students who have completed the primary course and those who are attending higher courses, a system of public examinations has been organised by the Department of Education with the concurrence of the University authorities, who accept as evidence of satisfactory educational qualification appropriate certificates issued by the Department. The University also holds an annual matriculation examination, on the results of which a number of University scholarships and prizes are awarded.

The regulations of the Department of Education provide for the issue of certificates which mark definite stages in the progress of school pupils. An examination is held at the end of the primary course on the results of which admission to secondary schools and super-primary courses is determined, and bursaries awarded under the Bursary Endowment Act.

The intermediate certificate marks the satisfactory completion of the super-primary courses and of the first three years of the secondary course. Provision has been made in recent legislation for an examination for the leaving certificate to be held subject to the requirements of the Board of Secondary School Studies, at the end of the fourth year of the secondary school course. Successful candidates, at the close of a year's further study, may submit themselves for examination for a higher leaving certificate, which will be accepted as indicative of fitness for admission to the University, if a pass is shown in matriculation subjects. Up to the present there has been only one examination for the leaving certificate, which is held at the close of the full five years' secondary course. This certificate is equivalent to the newer higher leaving certificate.

Certificates of proficiency are awarded to pupils of Evening Continuation Schools whose attendance and work have been satisfactory throughout the course.

The number of candidates and of passes at examinations for entrance to the high school, for which the primary final examination has been substituted, and for intermediate and leaving certificates during 1935 and 1936, are shown below:—

Examinations.	1935.			1936.		
	Candidates.	Passes.		Candidates.	Passes.	
		Number.	Per cent.		Number.	Per cent.
High School Entrance and Bursary ..	22,155	15,362	69·3	22,610	16,118	71·3
Intermediate Certificate ... ..	12,296	9,419	76·6	13,591	11,219	82·5
Leaving Certificate ... ..	3,011	2,260	75·1	2,778	2,132	76·7

## TECHNICAL EDUCATION.

Technical education is under the direct control of the Department of Education, and is administered by a Superintendent, who is also Assistant Director of Education, with financial and general procedure independent of other branches of the education system. The courses of instruction are co-ordinated, however, with those of the ordinary schools.

The Central Technical College is situated at Ultimo (Sydney). Colleges have been established also at Darlinghurst (East Sydney), Newcastle, Wollongong and Broken Hill and there are seventeen trade schools, viz., seven in the suburbs, nine in country towns and one at Canberra. In addition, elementary instruction is provided in special subjects at various metropolitan and country centres (including the colleges and trade schools) and correspondence courses are provided in a number of subjects.

Specialised instruction in the practice of a wide range of callings is provided for the apprentice and journeyman, while higher courses, embracing the technology of the various trades and technical professions, may be followed by more advanced students.

The lower trade courses cover a period of three years in the Trade Schools, but sometimes they are extended to five years. Comprehensive courses covering five years and higher courses of two years' duration are given in the Technical Colleges. The subjects are grouped to form trade classes, instruction being given in all branches of mechanical and electrical engineering, building, sanitation, applied art, domestic science, commercial subjects, agriculture, sheep and wool classing and in manufacturing trades.

Some of the higher courses of evening instruction are co-ordinated with first-year courses at the University, and the satisfactory completion of any course of instruction is marked by the award of certificates, viz., the Certificate of Trade Competency in trade courses and the College Diploma in the higher courses. These certificates are recognised by employers.

The fees payable for instruction are very low, being usually at the rate of 5s. per term of thirteen weeks for juniors, and 10s. for seniors.

Intending students are required to furnish evidence that they possess sufficient preparatory knowledge to take profitable advantage of the training, and a student is not usually admitted to a course unless actually engaged in the specific trade to which the course relates. Special provision is made for the admission of journeymen, without preliminary test, to any part of the courses relating to their trades. Young students are admitted if they furnish a guarantee to become apprenticed before reaching the limit of the age of apprenticeship.

A noteworthy feature of the system is the existence of advisory committees in connection with each course of instruction. These committees are composed of representatives of employers and employees, who visit the classes regularly and discuss with the Superintendent and heads of departments matters relating to the maintenance of standards of efficiency in equipment and teaching, and by this means the courses are made to meet practical needs.

The following table shows the number of classes and teachers and the enrolments at the Technical College and Trade Schools in 1921, 1931 and during the last five years, together with the amount of fees received and of money expended.

Year.	Number of Classes.	Lecturers and Teachers.	Total Enrolments.*	Individual Students.	Fees Received.	Net Expenditure.†
					£	£
1921	636	447	18,974	9,696	12,641	129,851
1931	747	576	33,345	15,152	23,020	155,561
1932	766	518	34,197	15,549	21,734	135,560
1933	775	554	36,174	17,102	22,736	167,589
1934	778	580	39,014	18,564	25,023	179,503
1935	789	633	43,129	19,959	27,481	165,388
1936	802	672	46,759	21,364	38,020	204,210

\* Students being counted in each class.

† After deducting fees received.

The net expenditure shown above is exclusive of interest on capital value of land, buildings, and equipment. The average net cost per student in 1935 was £8 5s. 9d. and in 1936 £9 11s. 2d.

The ages and sexes of the individual students attending technical classes in 1935 and 1936 were as follows:—

Age last Birthday.	1935.			1936.		
	Males.	Females.	Total.	Males.	Females.	Total.
14	457	557	1,014	453	598	1,048
15	952	814	1,766	1,211	883	2,094
16	1,733	856	2,589	1,908	892	2,800
17	1,900	790	2,690	1,990	744	2,734
18	1,816	708	2,524	1,821	591	2,412
19	1,412	516	1,928	1,564	493	2,057
20	1,012	390	1,402	1,151	364	1,515
21 and over	4,024	2,022	6,046	4,000	2,104	6,704
Total ...	13,306	6,653	19,959	14,695	6,669	21,364

In 1936 diploma courses were followed by 1,312 males and 7 females, compared with 1,011 males and 20 females in 1935; 6,853 males and 74 females were students in trade courses in 1936 compared with 6,610 males and 100 females in 1935. There were 4,375 female dressmaking and millinery students in 1936, and 4,339 female students in those classes in 1935. Cookery and art classes attracted 596 males and 1,578 females in 1936, and 574 males and 1,552 females in 1935. Students following miscellaneous classes numbered 5,934 males and 635 females in 1936 and 5,111 males and 642 females in the preceding year.

#### Technical Education Examinations.

The following are particulars of examinations conducted under the technical education system during the last five years:—

Particulars.	1932.	1933.	1934.	1935.	1936.
Number Examined ...	21,788	22,364	23,573	27,237	31,613
Number of Passes ...	17,759	18,857	19,565	22,087	26,782
Percentage of Passes ...	81.0	84.3	83.0	81.1	84.7

These figures afford evidence of a very encouraging growth in this important branch of education. The number of students examined in 1936 was 31,613, which exceeded by 8.3 per cent. the record of 1929, viz., 29,193. The number fell during the period of economic depression to 21,788 in 1932 and has shown a marked increase each year since..

#### Railway and Tramway Institutes.

Classes for the technical, commercial and general education of railway employees are conducted by the Railway Institute, which is under the control of a director.

The headquarters of the institute are in Sydney, and there are a number of branches in various parts of the State. The total membership embraces more than half the railway employees, and was 22,721 in 1935-36 and 22,809 in 1936-37. The number of students was 6,141 in 1935-36 and 6,190 in 1936-37, and the courses ranged from elementary railway principles to the University matriculation standard. Correspondence courses are provided. The institute possesses a library of 119,913 volumes.

A scholarship of the value of £150 per annum, tenable for four years, in engineering at Sydney University is awarded periodically to the most proficient student in the Engineering Matriculation Class.

Educational and recreational facilities are provided by the Road Transport and Tramways Institute, the membership of which at 30th June, 1937, was 5,092. The institute possesses an excellent library of 30,716 books. Two hundred and forty-five students were enrolled at 30th June, 1937, an increase of 57 during the year.

#### UNIVERSITY OF SYDNEY.

The University of Sydney was incorporated by Act of Parliament on 1st October, 1850, and it was granted a Royal Charter on 27th February, 1858, when its graduates were accorded the same status in the British Empire as graduates of the Universities of the United Kingdom. Since 1884 women have been eligible for all University privileges.

Within the University there are ten faculties, viz., Arts, Law, Medicine, Science, Engineering, Dentistry, Veterinary Science, Agriculture, Architecture, and Economics, besides a School of Domestic Science. Degrees are awarded in each of these faculties in addition to diplomas in Commerce, Education, Public Health, Tropical Medicine, Tropical Hygiene, Psychiatry, Anthropology, Public Administration, Radiology, and Pharmaceutical Science. There is also a course of study for pharmacy students proceeding to the final examination of the Pharmacy Board of New South Wales. Up to 1936 the University was prohibited by statute from providing instruction or granting degrees in Theology and Divinity, but this prohibition was removed by amendment of the University Act in June, 1936.

In 1854 an Act was passed to provide for the establishment within the University grounds of residential colleges in connection with the religious denominations. These colleges and the year in which each college was incorporated by Act of Parliament are as follows:—The Church of England (St. Paul's) 1854, Roman Catholic (St. John's) 1857 and (Sancta Sophia for women) 1929, Presbyterian (St. Andrew's), 1867, Methodist (Wesley) 1910. There is also the Women's College (1889), which is conducted on an undenominational basis. A teachers' college, which is non-residential and is not affiliated with the University, is maintained by the State for the training of teachers, and is situated in the University grounds.

Many benefactions have been bestowed on the University by private persons. These endowments include the Challis Fund, of which the original amount, £276,856 has been increased by investment to £384,059, the G. H. Bosch Fund, £252,035; the P. N. Russell Fund, £102,616; and the Fisher Estate, £42,467. In addition, the University receives a large annual revenue from the trustees of the McCaughey bequest. Excluding the principal of the McCaughey bequest, the credit balances of the private foundations amounted to £1,124,924 on the 31st December, 1936.

In 1930 the Rockefeller Foundation of New York authorised a grant of £100,000 towards the cost of building a clinical laboratory for the medical school which was officially opened on 29th September, 1933.

#### *University Finances.*

The University is supported chiefly by Government aid, the fees paid by students, and income derived from the private foundations.

The following statement shows the amounts derived from the principal sources of revenue, and the total expenditure during each year since 1931. Under the items are included sums received for capital expenditure on buildings, etc., and amounts from benefactors to establish new benefactions:—

Year.	Receipts.					Expenditure.	Private Endowment Funds—Credit Balance at end of Year.
	Government Aid.	Fees.	Private Foundations.	Other Sources.	Total.		
	£	£	£	£	£	£	£
1931	61,496	59,606	112,585	13,133	246,820	216,903	1,219,455
1932	54,808	64,360	102,556	11,503	233,227	214,470	1,230,220
1933	55,433	68,362	130,965	20,080	274,840	263,229	1,248,742
1934	56,333	72,556	77,615	5,694	212,198	204,251	1,264,618
1935	57,050	74,640	68,920	5,300	205,910	201,342	1,295,764
1936	67,945	79,955	79,272	2,568	229,740	219,934	1,162,053

\* Includes Retiring Allowances Fund.

There was a notable increase in receipts from private foundations in 1928 (£281,928) as a result of a special public appeal for donations towards the funds of the University. The moneys received therefrom were donated mainly for the development of education in medicine.

Salaries comprise the principal item of disbursements in each year. The total expenditure inclusive of capital expenditure in each year since 1931, was distributed as follows:—

Classification.	Amount.					
	1931.	1932.	1933.	1934.	1935.	1936.
	£	£	£	£	£	£
Salaries ... ..	157,741	141,606	147,281	150,055	158,764	172,548
Maintenance, Apparatus, etc.	32,110	27,447	30,082	32,246	32,238	32,886
Buildings and Grounds ...	19,616	36,597	77,436	13,739	3,340	6,799
Scholarships and Bursaries ...	7,022	7,382	6,971	6,842	7,000	7,053
Other ... ..	414	1,438	1,459	1,369	...	618
Total ... ..	216,903	214,470	263,229	204,251	201,342	219,934

### *Lectures, Staff, and Students.*

Before admission to courses of study leading to degrees, students must afford proof of educational qualifications by passing in prescribed subjects at the leaving certificate or matriculation examination. Non-matriculated students are admitted to lectures and to laboratory practice in certain faculties, but are not eligible for degrees. On the satisfactory completion of any course, however, they may be awarded a certificate. Lectures are delivered during the daytime in all subjects necessary for degrees and diplomas, and evening lectures are provided in the Faculties of Arts and Economics. Students are required to attend at least ninety per cent. of the lectures in each course of study leading to a degree.

Lectures are delivered during three terms in each year. The period of study and total cost of graduation in each faculty are as follow:—Arts, 3 years, £81; Economics, 4 years, £102; Law, 4 years, £103; Medicine, 6 years, £259; Dentistry, 4 years, £223; Agriculture, 4 years, £125; Veterinary Science, 5 years, £149; Science, 3 years, £105; Science (Honours), 4 years, £121; Engineering, 4 years—Civil, £184; Mechanical and Electrical, £188; Mining and Metallurgy, £199; Technology, £188; and Architecture, 5 years, £195.

Diploma courses are given in the following subjects, the term of study and total cost being indicated in each instance:—Commerce, 3 years, £48; Education, 1 year, £27; Psychiatry, 2 terms, £29; Public Administration, 3 years, £48; Public Health, £10; Tropical Medicine, £5; and Tropical Hygiene, £5. In the last three cases instruction is given at the Commonwealth School of Public Health and Tropical Medicine.

Public exhibitions or exemptions from the payment of fees are granted annually on the results of the leaving certificate examination to 200 students entering the University, and fees are remitted in the case of teachers or students in training for the teaching profession attending University lectures. A number of scholarships are awarded from private foundations, and bursaries may be awarded by the Senate. In 1936 fees were remitted in respect of 938 students, including exhibitors, State and University bursars, teachers and students in training as teachers. A general service fee of £1 1s. per term is imposed upon all students in attendance at lectures, including students exempt from payment of ordinary fees.

The number of degrees conferred by the University from the foundation to the end of 1936 was 14,843, made up as follows:—

Degree.			Number Conferred.		Degree.			Number Conferred.		
Degree.			During 1936.	To end of 1936.	Degree.			During 1936.	To end of 1936.	
M.A.	...	13	699	B.D.S.	...	17	306	B.Sc. Dom.	...	1
B.A. ...	...	152	4,937	L.D.S.	...	...	30	D.Sc. Eng.	...	2
LL.D.	...	...	37	D.Sc.	...	2	44	M.E.	...	20
LL.B.	...	41	994	M.Sc.	...	6	58	B.E. ...	...	32
M.D.	...	4	93	B.Sc.	...	76	1,288	M.Ec.	...	9
M.B.	...	84	2,541	D.Sc. Agr.	...	1	3	B.Ec.	...	35
Ch. M.	...	6	1,672	M.Sc. Agr.	...	2	4	B. Arch.	...	7
M.S.	...	2	3	B.Sc. Agr.	...	8	127			
B.S.	...	75	449	D.V.Sc.,	...	1	4			
D.D.Sc.	...	2	10	B.V.Sc.	...	30	118	Total	...	597
										14,843

In 1936 the teaching staff of the University included 49 professors and 199 lecturers and demonstrators. Professors and most of the lecturers are paid fixed salaries, and the remainder receive fees. Provision is made for superannuation for professors and full-time members of the teaching and administrative staffs.

The University has not the power to confer honorary degrees, but may admit *ad eundem gradum* graduates of approved Universities.

The following statement shows the number of students (including both degree and diploma students) attending in the different faculties in various years since 1921:—

Course.	1921.	1926.	1931.	1935.			1936.		
				Men.	Women.	Total	Men.	Women.	Total.
Faculty—									
Arts ... ..	868	813	1,057	377	331	708	396	340	736
Law ... ..	328	288	300	272	6	278	305	5	310
Medicine ... ..	985	403	483	615	83	698	663	79	742
Science ... ..	220	217	333	191	119	310	187	127	314
Engineering ... ..	224	124	166	160	...	160	150	...	150
Dentistry ... ..	82	59	64	100	6	106	100	6	106
Veterinary Science .	16	10	43	90	14	104	130	14	144
Agriculture ... ..	28	25	60	44	7	51	43	7	50
Architecture ... ..	55	41	44	21	6	27	17	8	25
Economics ... ..	286	213	398	375	36	411	409	42	451
Pharmacy Students ...	204	243	161	154	19	173	139	31	170
Massage Students ...	21	11	38	...	27	27	...	23	23
	3,317	2,447	3,147	2,399	654	3,053	2,539	682	3,221
Less Students enrolled twice ... ..	42	25	28	24	...	24	15	...	15
Total, Individual Students ...	3,275	2,422	3,119	2,375	654	3,029	2,524	682	3,206

The number of students attending the University has varied only slightly during the last three years. In 1936 there were 2,217 men and 572 women pursuing degree courses, and diploma students included 307 men and 110 women. There were also in attendance 103 post-graduate students, viz., 73 in the Faculty of Arts, 23 in Science, and 7 in Medicine. Students admitted to matriculation during the year numbered 720 as compared with 575 in 1921 and 626 in 1935.

#### University Clinics.

Three metropolitan hospitals, viz., Royal Prince Alfred, Sydney, and St. Vincent's, provide clinical schools for students in medicine who are required to attend at these institutions for clinical lectures, training and practice during the fourth, fifth, and sixth years of the medical course.

At the Royal Alexandra Hospital for Children provision is made for systematic instruction to medical students in diseases of children.

Clinical training and practice in obstetrics is provided at the Royal Hospital for Women (Paddington) and the Women's Hospital (Crown-street).

Other hospitals where studies may be undertaken in connection with the faculty of medicine are:—the Callan Park and Newcastle Mental Hospitals, the Broughton Hall Psychiatric Clinic, the Renwick Hospital for Infants, and the South Sydney Hospital for Women.

In connection with the Faculty of Dentistry, the Dental Hospital of Sydney provides facilities for the instruction of students. The University lecturers in surgical and mechanical dentistry are, *ex officio*, honorary dental surgeons of the hospital.

*Appointments Board.*

An Appointments Board has been created for the purpose of assisting undergraduates and recent graduates in obtaining positions. To this end the Board endeavours to supply employers with accurate reports concerning graduates and undergraduates who are required to register with the Board.

*Extension Lectures.*

University Extension Lectures are conducted under the direction of a University Extension Board of from twelve to eighteen members appointed annually by the Senate. Courses of lectures upon topics of literary, historical, and scientific interest are given in various centres at a charge of £2 per lecture. At the conclusion of a systematic course of ten lectures, an examination may be held and certificates awarded to successful candidates. During 1936, 126 lectures were delivered in Sydney and 10 country towns, and a grant of £260 was received from the Government for the maintenance of Extension Board classes.

*Tutorial Classes.*

In accordance with the provisions of the University Amendment Act of 1912, the Senate has established regular evening tutorial classes, and the Government contributes an annual grant for the maintenance of tutorial classes, the amount in 1935-36 being £3,866. Tutorial classes are open to unmatriculated as well as to matriculated students, and diplomas may be issued to persons who have studied in these classes for at least one year in any one subject. Tutorial classes, which may be established in particular branches of study upon specific requisition by intending students, have been formed in conjunction with the Workers' Educational Association in suburban and country centres as well as at the University. A resident tutor is stationed at Newcastle. Particulars of the classes are shown on a later page with other information relating to the Workers' Educational Association.

## SCHOLARSHIPS AND BURSARIES.

It is the policy of the State to assist promising students to obtain secondary and tertiary education by granting scholarships and bursaries and a number are provided by private endowment. Particulars of these scholarships and bursaries and the conditions attached thereto have been given in previous issues of the Year Book.

Scholarships tenable at State secondary schools are not awarded because fees are not charged, and school material is supplied to all pupils. A few scholarships—six in 1936—are provided by the State to enable boys to attend the Sydney Grammar School.

At the Intermediate Certificate Examinations, 1936, which included pupils from Junior Technical, Commercial, and Domestic Science Schools, 104 scholarships were awarded. Thirty-one boys were given scholarships for Lower Trade Courses at the Technical College, 14 boys were awarded Agricultural Scholarships, 2 boys and 18 girls were awarded Commercial scholarships, and scholarships for Art, Domestic Arts and Women's Handicrafts

were awarded to 39 girls. At the Leaving Certificate Examination 21 boys and 2 girls were awarded scholarships for Diploma courses at Technical Colleges; in addition, 200 exhibitions were provided exempting the holders from the payment of fees to the University, viz., 111 pupils of State schools, and 89 pupils of registered secondary schools. In the same year 20 boys at evening continuation schools won scholarships for free education and a supply of text-books valued at £1 10s. per annum, tenable at day courses.

#### *Bursary Endowment.*

The Bursary Endowment Act, 1912, as amended by the Public Instruction and University (Amendment) Act, 1936, provides public moneys for bursaries tenable in public or private secondary schools, in technical schools or colleges under the Department of Education, and in the University of Sydney. The fund is administered by a board, consisting of two representatives each of the University of Sydney, of the Department of Education, and of the private secondary schools registered under the Act.

The bursaries awarded in 1936 numbered 200, of which 196 were accepted. Of these 153 were tenable at State high schools and 43 at private schools for 5 years from 1st January, 1936; 152 boys and 97 girls were awarded bursaries for 5 years from 1st January, 1937, and all but seven were accepted. 188 were tenable at State schools and 54 at private schools.

Bursaries tenable for two or three years, are awarded upon the results of the Intermediate Certificate Examination. They are of the value of fourth and fifth year bursaries. Thirty-two were awarded during 1936, and of these 22 were accepted by boys and 9 by girls. Thirty-three bursaries were awarded and 31 accepted (20 boys and 11 girls) in 1937.

Bursaries tenable at the University of Sydney may be awarded to candidates at the Leaving Certificate Examination who are under 19 years of age and whose parents' means are inadequate for the expense of a University education. The number of such bursaries awarded annually usually ranges in the vicinity of 30, but only 14 were awarded in 1936 and 17 in 1937, of which 8 were accepted by boys and 6 by girls in 1936, and 13 by boys and 4 by girls in 1937.

At 30th June, 1937, excluding 292 holders of war bursaries, there were 814 pupils holding bursaries under the Bursary Endowment Act, viz., 756 attending courses of secondary instruction, and 58 attending University lectures. The annual monetary allowances paid in 1935-36 and 1936-37 were as follow:—

Rate of Allowance.	Number of Bursars.		Rate of Allowance.	Number of Bursars.	
	1935-36.	1936-37.		1935-36.	1936-37.
£ s. d.			£ s. d.		
9 12 0	323	400	24 12 0	1	1
14 8 0	77	82	25 3 0	...	1
15 12 0	1	...	32 0 0	120	139
19 4 0	84	67	40 0 0	63	62
19 12 0	...	1	52 0 0	12	17
20 0 0	43	41			
21 12 0	3	3	Total ...	727	814

In addition to the bursaries made available by the Bursary Endowment Board, two bursaries, tenable for three years at the Hawkesbury Agricultural College, are awarded by the Department of Agriculture on the results of the College entrance examination. These bursaries exempt their holders from payment of the education and maintenance fee of £30 per annum.

War bursaries are provided by the Bursary Endowment Board for children of incapacitated and fallen soldiers. The number in operation at 30th June, 1937, was 292, each bursar receiving £10 per annum. The total number awarded since they were initiated in 1916 was 3,784.

The war bursaries are awarded usually to children between the ages of 11 and 13 years. Upon reaching the latter age the children become eligible for benefits under a scheme adopted by the Repatriation Commission to assist such children to obtain higher education and training for skilled trades, technical or professional careers. From the date these benefits became available in February, 1921, to 30th June, 1937, applications to the Commission were approved in 6,603 cases in New South Wales and a sum of £639,665 was expended in the State. This sum included private gifts and bequests, but the greater part was provided by the Commonwealth Government.

For the education of the children of fallen soldiers and sailors assistance is granted also from the Anzac Memorial Bursary Fund which was created by public subscription and vested in the Bursary Endowment Board. Bursaries awarded from this fund are tenable at secondary schools or the University. To 30th June, 1937, the number of such bursaries awarded was 82.

#### TRAINING OF TEACHERS.

Two colleges are maintained by the State for training teachers for service in State schools.

The Sydney Teachers' College, situated in the University grounds, provides two courses for the training of teachers, viz.:—(a) for service in the infant, primary, and rural schools, and (b) for service in secondary schools. The former course extends over two years and the latter over four years including graduation to the University in Arts, Science, Economics or Agriculture. The course for secondary school teachers may be extended to five years in special circumstances, and in the case of students who had graduated before admission to the college one year's professional training only is required. Practical training and observation is provided at special demonstration schools associated with the college and at other selected schools. A hostel has been established for men students and seven for women students. Women students living away from home are required to reside in a hostel unless given special exemption. In 1936 the teaching staff included the principal, vice-principal, warden of women students, 32 lecturers and one visiting lecturer. There were 738 students enrolled during the year, of whom 70 were University graduates.

The course at the Armidale College is similar to the two years' course at the Sydney Teachers' College. A hostel has been established for women students. The teaching staff in 1936 included the principal, 3 wardens of women students, 17 lecturers, and 6 visiting lecturers. There were 276 students on the roll during the year.

In 1936 each college provided a one-year course for the training of teachers for the rural schools.

Most of the students are scholarship holders, but a small group of paying students is usually in attendance. Provision is made for training teachers for private schools on certain conditions, but few persons avail themselves of the privilege. Members of the teaching staffs are afforded opportunity for study abroad and leave of absence on full pay may be granted for this purpose.

Particulars of students enrolled at the Teachers' Colleges during 1936 are shown in the following statement:—

Students.	Men.	Women.	Total.
One-year Course .....	87	51	138
Two-year Course—			
First year ... ..	169	208	377
Second year ... ..	155	161	316
University Course—			
First year ... ..	23	40	63
Second year ... ..	11	5	16
Third year ... ..	11	3	14
Fourth year ... ..	4	...	4
Fifth year ... ..	1	1	2
Graduate Professional Course ...	23	47	70
Private ... ..	...	13	13
Total ... ..	484	529	1,013

The libraries at these institutions contained 51,386 volumes in 1936. Teachers in the Roman Catholic Schools are with few exceptions members of religious communities. They are trained at thirty-three centres located in different parts of the State. These centres are registered by a Board of Registration—a central body appointed by the Roman Catholic Hierarchy of New South Wales—after inspection and examination. The course of training lasts two years—one year being the novitiate year required by the communities, the other the year of professional training. The entrance qualification is the leaving certificate or its equivalent. Certificates in three grades—sub-primary, primary and super-primary—are issued to those who are successful in the theoretical and practical examinations conducted by the Board.

#### *Classification of State Teachers.*

Teachers in the service of the State are classified, and are promoted from one grade to another according to their efficiency, which is gauged on reports of inspectors and their attainments as tested by written and oral examinations. Students who have completed a course of training at the Teachers' Colleges are required to obtain practical experience as teachers before they are classified.

A comparative statement of the classification of the teaching staff of the State schools (including students in training) at the end of the years 1926 and 1936 is shown below; those in the Technical Education Branch are not included.

Teachers.	1926.			1936.		
	Men.	Women.	Total.	Men.	Women.	Total.
High School Teachers ...	437	365	802	859	574	1,433
Principals and Assistants—						
First Class ...	517	151	668	497	147	644
Second Class ...	1,342	1,061	2,403	1,683	1,537	3,220
Third Class ...	1,141	1,639	2,780	1,214	1,415	2,629
Unclassified ...	142	415	557	121	251	372
Awaiting Classification ...	385	729	1,114	704	748	1,452
Cookery Teachers ...	...	110	110	...	211	211
Sewing Mistresses ...	...	221	221	...	162	162
Manual Training Teachers ...	181	...	181	264	...	264
Visiting Teachers ...	27	66	93	15	86	101
Temporary Teachers ...	57	573	630	32	335	367
Total ...	4,229	5,330	9,559	5,389	5,466	10,855
Subsidised School Teachers ...	433	823	1,256	207	602	809
Students in Training ...	27	471	498	476	517	993
Grand Total ...	4,689	6,624	11,313	6,072	6,585	12,657

There has been a general advance in the standard of educational attainments of teachers in New South Wales during the past ten years. The number of unclassified teachers has decreased absolutely and relatively, and there has been a large increase in the number of high school teachers. At the end of 1936 there were 1,915 University graduates in the teaching service, viz., 1,072 men and 843 women, whereas there were only 958 at the close of 1926.

Teachers awaiting classification consist mainly of ex-students of the Teachers' Colleges ineligible for classification until they have obtained the requisite teaching experience. Most of them possess the educational attainments for second or third class certificates.

Teachers of subsidised schools are not required to be trained, but they must have sufficient educational attainments to teach the curriculum of primary schools. Schools of method are held in Sydney during the mid-summer vacation for the purpose of increasing the knowledge and efficiency of these teachers. The average number of pupils enrolled in subsidised schools is a little over seven per teacher, the schools being situated in remote districts.

In October, 1932, legislation was passed to restrict the employment of married women as lecturers or teachers in the service of the State and provision was made for the termination of the services of a number of such teachers in order that positions might be made available for students who had completed courses of training provided by the State. To 31st December, 1936, the services of 498 married women teachers had been terminated.

## STATE EXPENDITURE ON EDUCATION.

*State Schools.*

The following statement provides a comparison of the State expenditure on schools at intervals since 1901. The expenditure on technical education is not included. The basis used for calculations of costs per pupil, formerly the mean quarterly enrolment, has now been changed to the average weekly enrolment as the more appropriate base to which costs should be related. For years prior to 1921 the average weekly enrolment is not available. In determining the average weekly enrolment the net enrolments week by week in each term are added and averaged, and one-third of the sum of the term averages is taken:

Year.	Average Weekly Enrolment.*	Expenditure.			Per Pupil—Average Weekly Enrolment.		
		Maintenance and Administration.	School Premises.	Total.	Maintenance and Administration.	School Premises.	Total Expenditure.
		£	£	£	£ s. d.	£ s. d.	£ s. d.
1901 ...	212,725†	703,974	57,663	761,637	3 6 2	0 5 5	3 11 7
1911 ...	223,603†	1,048,583	193,993	1,242,576	4 13 9	0 17 4	5 11 1
1921 ...	295,961	3,229,042	329,795	3,558,837	10 18 3	1 2 3	12 0 6
1929 ...	352,071	4,207,754	846,625	5,054,379	11 19 0	2 8 1	14 7 1
1931 ...	371,841	3,823,684	415,379	4,239,063	10 5 8	1 2 4	11 8 0
1932 ...	368,868	3,529,989	178,532	3,708,521	9 11 5	0 9 8	10 1 1
1933 ...	366,178	3,267,221	360,195	3,627,416	8 18 5	0 19 8	9 18 1
1934 ...	364,513	3,312,617	300,999	3,613,616	9 1 9	0 16 6	9 18 3
1935 ....	363,407	3,523,552	406,662	3,930,214	9 13 11	1 2 5	10 16 4
1936 ...	358,047	3,642,321	377,403	4,019,724	10 3 5	1 1 1	11 4 6

\* Inclusive of Evening Continuation Schools.

† Average quarterly enrolment.

Although the expenditure on the State schools rose steadily between 1901 and 1911, the expansion of the system caused a more rapid increase in expenditure during the following decade. Part of this additional expenditure was occasioned by the increase in the number of scholars, but the cost of education per pupil was more than doubled between 1911 and 1921. The expenditure continued to rise steadily until 1929 when the cost of maintenance and administration was £11 19s. per pupil and the expenditure on school premises £2 8s. 1d., making a total of £14 7s. 1d. per pupil. The average was even higher in the preceding year, when the expenditure on school buildings was £3 2s. 2d. per pupil. In 1930 measures were taken to restrict general expenditure, and moneys for buildings were curtailed so that the total annual expenditure on primary and secondary schools had been reduced to £3,613,616, or £9 18s. 3d. per pupil in 1934. It has increased since and in 1936 amounted to £4,019,724, or £11 4s. 6d. per pupil.

The following statement shows the distribution of expenditure, including capital expenditure in connection with primary and secondary schools (but omitting expenditure on technical education) in 1921 and subsequent years:—

Particulars.	1921.	1923.	1931.	1935.	1936.
Sites, Buildings Additions*—	£	£	£	£	£
Primary Schools†	173,781	429,501	145,012	188,744	62,163
High Schools	26,703	49,742	13,505	35,407	72,132
Teachers' Colleges	3,816	...	26,427	867	...
Rates (municipal and shire)†	36,376	61,531	69,625	30,531	42,428
Rent, Furniture and Repairs	89,120	163,144	160,810	151,113	200,680
Salaries and Allowances—					
Primary Schools†	2,446,638	2,645,591	2,736,554	2,588,327	2,651,470
High Schools	200,028	333,966	465,767	493,137	523,807
Evening Continuation Schools..	12,190	16,191	16,826	11,124	11,634
Other Maintenance Expenditure—					
Primary Schools†	188,975	195,673	202,755	176,838	180,057
High Schools	27,314	39,990	37,470	37,003	41,727
Evening Continuation Schools...	1,541	1,558	1,219	668	624
Bursaries and Scholarships	58,285	36,505	39,237	19,697	18,710
Boarding and Conveyance Allowances	36,149	44,503	53,332	16,576	20,530
Training of Teachers	98,537	118,315	135,503	54,593	64,994
School Medical Inspections	22,197	34,219	21,593	19,643	20,516
School Inspection	47,971	50,288	113,428	105,946	108,852
Administration and other Expenses	89,216	110,553			
Total...	£3,558,837	4,327,570	4,239,063	3,930,214	4,019,724

\* Includes State Insurance on School Buildings.  
† Includes expenditure on super-primary education in intermediate high, district, continuation and rural schools.

The amounts shown in the foregoing tables do not include any allowance for vested residences granted to teachers, of which the annual value was estimated at £50,520 in 1936. The figures are also exclusive of interest paid on loan money used for the erection of schools.

#### *Capital Expenditure on School Buildings, etc.*

Large sums have been expended for the purpose of building new schools, teachers' residences, etc., though the funds available since 1931 have been abnormally low owing to financial stringency. The total amount so expended during the decennium ended 30th June, 1936, was £3,858,962, the expenditure in each year being as follows:—

Year ended 30th June.	Amount.	Year ended 30th June.	Amount.
	£		£
1927	653,047	1932	91,438
1928	769,943	1933	135,824
1929	788,701	1934	238,041
1930	400,323	1935	216,284
1931	335,647	1936	229,701

The whole of this expenditure was met from loan funds in 1929 and 1930, and from 1933 to 1936, and a proportion in each of the other years indicated. In 1927 and 1928 expenditure from the Public Works Fund was included, viz., 1927, £144,394 and 1928, £197,052. In 1931 and 1932 a proportion was met from the Unemployment Relief Fund, the amounts being £180,275 and £48,314 respectively.

*Total Public Expenditure on Education.*

In addition to expenses incurred in respect of the State school system, the public expenditure on education in New South Wales includes grants and subsidies to the University and other educational and scientific organisations. A summary of the total expenditure by the State in respect of education in various years since 1911 is shown below. The expenditure on buildings, equipment, sites, etc., representing capital expenditure, is distinguished as far as practicable from expenditure for maintenance, including grants and subsidies which may be regarded as annual costs.

Year ended 30th June.	Expenditure.			
	Capital.	Annual.	Total.	Per head of Population.
	£	£	£	£ s. d.
1911	176,778	1,213,368	1,390,146	0 17 5
1921	251,880	3,473,545	3,725,425	1 15 8
1931	345,870	4,662,103	5,007,973	1 19 4
1932	93,786	4,175,204	4,268,990	1 13 3
1933	140,791	3,844,849	3,985,640	1 10 9
1934	241,225	3,701,015	3,942,240	1 10 2
1935	238,819	3,946,122	4,184,941	1 11 9
1936	243,252	4,227,154	4,470,406	1 13 8

These figures are exclusive of amounts spent by the State on the agricultural college and experiment farms and societies for the promotion of agricultural and allied interests. They exclude also the interest paid on loan money invested in works used for public instruction.

*EDUCATIONAL AND SCIENTIFIC SOCIETIES.*

Many organisations are in existence in New South Wales which have for their objective the encouragement of professional interests, and the advancement of science, art, and literature. These include the Royal Society of New South Wales, which has for its objects the advancement of science in Australia, and the encouragement of original research in all subjects of scientific, artistic, and philosophic interest, and the Linnæan Society of New South Wales, established for the special purpose of promoting the advancement of the botany and natural history of Australia.

Other important scientific societies are the Royal Zoological Society of New South Wales, inaugurated in 1879; a branch of the British Medical Association, founded in 1881; a branch of the British Astronomical Association; the Australasian Association for the Advancement of Science; the Royal Geographical Society; the University Science Society; Australian Historical Society; the Naturalists' Society of New South Wales; and a branch of the Economic Society of Australia and New Zealand formed in 1925.

All the learned professions are represented by associations or societies.

The Royal Art Society holds an annual exhibition of artists' work at Sydney; and of the many musical societies, mention may be made of the Royal Sydney Apollo Society, and the Royal Sydney Philharmonic Society.

*Workers' Educational Association.*

The Workers' Educational Association of New South Wales was founded at a conference called by the Labour Council of New South Wales in June, 1913. It organises tutorial classes, study circles, summer and holiday schools and public lectures. In 1935, the membership of the association

in New South Wales consisted of 875 individual members, which included 464 students using the library, and 47 organisations, other than tutorial classes, were affiliated with it. There were 787 members, including 415 students using the library, and 48 affiliated organisations in 1936.

In 1936, fifty-seven tutorial classes were held, viz., eleven at the University, twenty-two in the city and suburbs, eleven in the Newcastle district, and thirteen in other country districts. The number of students enrolled was 1,821 in 1935 and 1,965 in 1936, and the effective enrolment was 1,595 and 1,706 respectively. The Association had an income in 1936 of £1,517, including an endowment of £500 from the State and a grant of £100 from the University, and subscription fees amounted to £589.

#### CONSERVATORIUM OF MUSIC.

The State Conservatorium of Music, which was established in 1915, provides tuition in music, from the elementary to the advanced stages. The studies are divided into two sections. The Music School Section provides three courses, viz., elementary, intermediate, and advanced—the last-mentioned extending over two years. A certificate is granted on the satisfactory conclusion of each course. The advanced grade certificate of the music school section entitles the holders to admission to the diploma section, in which a course of two years' tuition, leading to the professional diploma, is given under the personal direction of the Director of the Conservatorium. A preparatory course is available for juveniles who have not previously received musical tuition. An Opera School was established in February, 1935, in connection with the Conservatorium to provide complete opera and stage training for talented young singers.

The number of students enrolled in the various courses of study at the Conservatorium was 937 in 1932, 827 in 1933, 876 in 1934, 950 in 1935, and 1,094 in 1936. The number in each year from 1932 to 1936 included diploma students, of whom six gained the diploma during 1932, four in 1933, seven in 1934, four in 1935, and nine in 1936. The receipts in 1936 consisted of fees, receipts from concerts, etc., amounting to £20,255, and the expenditure was £28,133. The corresponding figures for 1935 were:—Receipts, £20,300; expenditure, £27,360.

#### MUSEUMS, LIBRARIES, AND ART GALLERY.

The Government of New South Wales maintains a number of museums and libraries and a National Art Gallery. The capital expenditure by the State on buildings for these institutions to 30th June, 1937, amounted to £417,442, including £11,436 capital cost of the Herbarium.

##### *Museums.*

The Australian Museum in Sydney is the oldest institution of its kind in Australia. It is incorporated under the control of trustees, with a State endowment, which is supplemented by annual Parliamentary appropriations. It contains fine specimens of the principal objects of natural history, and a valuable collection of zoological and ethnological specimens. A library containing 28,719 volumes at 31st December, 1936, is attached to the institution. Lectures and gallery demonstrations are given in the Museum and are open to the public. During the year 1936, visitors to the Museum numbered 198,715, as compared with 208,910 in 1935. The expenditure during the year 1936 was £16,914, and amounted to £15,776 in 1935. The institution is supported by a statutory endowment of £800 per year and by an

annual parliamentary appropriation. Including the vote from consolidated revenue, the income for the year ended 30th June, 1936, amounted to £17,037, compared with £15,448 in the preceding financial year.

A Technological Museum has been established as an adjunct to the Central Technical College. It contains a valuable series of specimens illustrative of various stages of manufacturing, and a collection of natural products acquired by purchase, gift, loan, or exchange. Technological Museums are established also at Goulburn, Bathurst, West Maitland, Newcastle, and Albury.

Research work is conducted by the scientific staff at the Technological Museum in connection with the development of the natural resources of Australia.

There is a Mining and Geological Museum attached to the Department of Mines. Its functions include the preparation and collection of minerals to be used as teaching aids in schools and in other institutions.

The Agricultural and Forestry Museum is an adjunct of the Department of Agriculture.

The public have access to the "Nicholson" Museum of Antiquities, the "Macleay" Museum of Natural History, the Museum of Normal and Morbid Anatomy, attached to the Sydney University, and the National Herbarium and Botanical Museum at the Botanic Gardens. Housed in the Macleay Museum is the Aldridge collection of Broken Hill minerals.

#### *Public Library of New South Wales.*

The Australian Subscription Library, established in 1826, became a State institution in 1869. In 1899, as the Public Library of New South Wales, it was incorporated with a body of trustees and an annual statutory endowment of £2,000, which is supplemented by parliamentary appropriations on the Estimates of the Department of Education.

The library embraces a General Reference Library, a Country Circulation Department, the Mitchell Library and the William Dixon Gallery. In June, 1937, the General Reference Library contained 267,030 volumes, exclusive of pamphlets, and in 1936-37 visitors numbered 210,337 on week days and 13,703 on Sundays. This Library includes a Research Department, which made 746 researches during the year and added 23,187 references to its own indexes. The Country Circulation Department contains 82,867 volumes, and during the year sent out 5,099 boxes and parcels to rural schools and 623 boxes to agricultural bureaux, teachers' associations, mechanics' institutes and similar institutions, and 56,644 books to individual students.

In 1898 the late David Scott Mitchell promised the trustees of the Public Library a collection of 60,000 volumes dealing principally with Australasia and the Southern Pacific, together with manuscripts and pictures, and with these he bequeathed £70,000, the income from which is spent on additions. In June, 1937, there were 140,034 volumes in the Mitchell Library, and in 1936-37 visitors numbered 36,024.

In 1928 Mr. William Dixon gave a unique collection of pictures and prints relating to Australian history to the Public Library, to which he has made valuable additions from time to time. This collection forms the William Dixon Gallery.

The National Library Act (1924) authorised the erection of new buildings at an estimated cost of £495,000 and the work of construction is in progress. The total cost to the State of Public Library buildings at 30th June, 1937, was £140,313, which included £28,693, the cost of the older building housing the Reference Department and £111,620 expended on the new building (incomplete) containing the Mitchell Library, the Dixson Gallery and the Country Circulating Department. The expenditure on maintenance during 1936-37 was £24,650, in which was included £3,318 from the Mitchell Library Endowment Fund.

#### *Sydney Municipal Library.*

The Sydney Municipal Library is a free lending library administered by the Council of the City of Sydney. It contained 47,633 volumes in 1936.

Maintenance costs during 1936 amounted to £12,850, including £1,660 for new books. The total maintenance costs in 1935 amounted to £12,767.

#### *Other Libraries.*

Local libraries established in a large number of centres throughout the State, may be classed broadly under two heads—Schools of Arts, which are organised and controlled by committees of private citizens and formerly were subsidised by the State, but are now dependent upon the monetary support accorded by the public; and free libraries established in connection with municipalities. Under the provisions of the Local Government Act any shire or municipality may establish a public library, art gallery, or museum.

The library of the Australian Museum, though intended primarily as a scientific library for staff use, is accessible to students, and 28,719 volumes may be found on the shelves. In the library attached to the National Herbarium there are approximately 10,000 volumes.

The libraries in connection with the Technological Museum, and the Technical College and branches contain 19,206 text-books. In the libraries of the Teachers' Colleges there are 51,386 volumes; in libraries attached to State Schools, 526,236 volumes; and in the Fisher Library at the University 231,000 volumes.

The Parliamentary Library contains over 83,000 books, and large numbers of volumes are in the libraries of the law courts and Government offices.

#### *National Art Gallery of New South Wales.*

The National Art Gallery contains a good collection of oil paintings, water colours and statuary, including some works of prominent modern artists, and some valuable gifts from private persons.

The present value of the contents of the Gallery is £120,000, and the cost of the building to 30th June, 1937, was £95,514.

The number of paintings, etc., in the Gallery at the end of 1936 was 3,338, viz., 691 oil paintings, 485 water-colours, 1,091 black-and-white works, 194 statuary casts and bronzes, and 877 other works of art, and the total amount expended during the year in purchasing works of art was £735. Twenty-five works of art were acquired by purchase during the year and 7 by gift.

The total expenditure during 1936 amounted to £4,745, including salaries and wages of £3,502. In 1935 expenditure amounted to £6,073, of which £3,348 was paid in salaries and wages.

The attendance at the National Art Gallery during 1936 was 138,625 on week-days and 76,078 on Sundays. Respective attendances in 1935 were 168,844 and 80,331.

Art students, under certain regulations, may copy works and enjoy the benefit of a collection of books of reference on art subjects. Collections of pictures are sent to the principal country towns for temporary exhibition, 327 pictures being so distributed during 1936.

The Gallery has received but small support from private endowments, and consequent upon its limited funds, is restricted mainly to the collection of specimens of contemporary art.

The Wynne Art Prize consisting of the interest on approximately £1,000 is awarded annually to the Australian artist or sculptor producing the best landscape painting of Australian scenery in oils or water colours, or the best production of figure sculpture.

The Archibald Prize is awarded for the best portrait, "preferably of some man or woman distinguished in art, letters, science, or politics painted by any artist resident in Australasia." The amount available for the prize in each year is approximately £400.

The Sir John Sulman Prize founded by the widow and children of the late Sir John Sulman is derived from the proceeds from the investment of £2,500. It is awarded annually for the best subject of genre painting or mural decoration or design for an intended mural decoration, done by an artist resident in Australia for two years preceding the date fixed for the submission of the pictures for inspection.

## LAW COURTS.

A cardinal principle of the legal system of New South Wales like that of England on which it is based is the supremacy of the law to which all persons are bound to conform. No person may be punished except for a breach of law which has been proved in due course of law in a court before which all persons have equal rights. It excludes the existence of arbitrariness or prerogative on the part of the government or of any exemption of officials or others from obedience to the ordinary law or from the jurisdiction of the ordinary tribunals.

### SOURCES OF LAW.

The law in force in New South Wales consists of—

- (i) So much of the common law of England and such English statute law as came into force on the original settlement of the colony in 1788, or was made applicable by the New South Wales Constitution Act passed in 1828.
- (ii) Acts passed by the Parliament of the State of New South Wales, together with regulations, rules, orders, etc., made thereunder.
- (iii) Acts passed by the Parliament of the Commonwealth of Australia within the scope of its allotted powers, together with regulations, rules, orders, etc., made thereunder.
- (iv) Imperial law binding New South Wales as part of the British Empire, as part of the Commonwealth of Australia, or as a State—subject, since 1931, to the Statute of Westminster. (These relate mainly to external affairs or matters of Imperial concern.)
- (v) Case law. (The extent to which judicial decisions of the English, Commonwealth or State Courts respectively form part of the State law would require too lengthy a statement to be set out here.)

The proper subjects for Federal legislation are limited to those specified in the Commonwealth Constitution. In some cases Federal powers of legislation are exclusive of, in others concurrent with, those of the State. In all cases of conflict valid Federal laws override State laws.

### THE JUDICIAL SYSTEM.

Characteristic features of the Judicial System are—(a) The law is enforceable in public courts; (b) the judiciary is independent of control by the executive; (c) officials concerned with the administration of justice do not enjoy any exemption from law; (d) advocates are admitted to practice by and subject to control exercisable through the Supreme Court.

The work of the courts is distributed amongst various jurisdictions with a view to simplifying procedure and avoiding unnecessary delay. Minor civil matters are heard in Courts of Petty Sessions (Small Debts Courts) which have a jurisdiction limited in point of locality and amount. The civil jurisdiction of District Courts also is limited in these respects. The Supreme Court's jurisdiction is limited only in respect of matters which are reserved for the original jurisdiction of the Federal Courts. In criminal matters less serious offences are heard in Courts of Petty Sessions (Police Courts), other offences, not being of a capital nature, being dealt with by Courts of Quarter Sessions. Capital charges are tried at sittings of the Supreme Court and in practice offences of an important public nature are often so dealt with.

A number of legal tribunals have been established to deal with special matters, viz., Licensing Courts, Taxation Courts of Review, Wardens' Courts (Mining), Courts of Marine Inquiry, Land and Valuation Court,

and, among criminal courts of magisterial rank, Coroners' Courts and Children's Courts. Special jurisdictions are exercised by the Industrial Commission and by the Workers' Compensation Commission. Particular matters arising under the various land laws of the State are dealt with by Local Land Boards. A Transport Appeal Court, consisting of a District Court Judge, hears appeals from certain decisions of the transport authorities. Jurisdiction to hear disputes arising under the Friendly Societies Act and the Co-operation Act is given to the Registrar under those Acts. Women are eligible to be appointed as judges, magistrates, or justices of the peace.

New South Wales as a State of the Commonwealth forms part of the Commonwealth Judicial System. By the Commonwealth Judiciary Act, 1903-1934, the jurisdiction of the High Court is exclusive in regard to certain matters. In regard to other matters the courts of the State are invested with Federal jurisdiction subject to conditions stated in that Act.

Appeal lies to the Privy Council from the Supreme Court of New South Wales and the High Court of Australia, respectively, in proper cases. The Privy Council is the final Court of Appeal for the British Dominions.

#### ADMINISTRATION OF JUDICIAL SYSTEM.

##### *Ministers of the Crown.*

In New South Wales the duty of administering laws is allotted to Ministers of the Crown in their respective spheres. A table of Acts administered by each Minister, may be found in "The New South Wales Parliamentary Companion." A list of these Acts, together with other functions of the various Ministers, appears in each copy of *Hansard* (daily proceedings). Usually an Attorney-General and a Minister of Justice are included amongst the Ministers, but some times these offices are combined. At times a Solicitor-General has been included in the Cabinet. At other times he has been a salaried public servant. There is also a Crown Solicitor—a salaried public servant. A common practice is to have an officer known as Assistant Law Officer as a further legal adviser to the Government.

The Attorney-General who is the legal adviser of the Government, is charged with the conduct of business relating to the higher courts (such as Supreme and District Courts), the offices of the Crown Solicitor, Crown Prosecutors, Clerk of the Peace, Parliamentary draftsmen and Court reporters as well as statute law consolidation and certain Acts, including the Crimes Act, the Poor Prisoners' Defence Act and the Poor Persons' Legal Remedies Act. Furthermore, he advises Ministers on questions on which his legal opinion is required, initiates and defends proceedings by and against the State, and determines whether a bill should be found in cases of indictable offences. The grand jury system has not been adopted. The Attorney-General is in the position of a grand jury to find a bill. No person can be put upon his trial for an indictable offence unless a bill has been found, except where an *ex officio* indictment has been filed by the Attorney-General or the Supreme Court has directed an information to be filed.

The Minister of Justice supervises the working of the magistrates' courts, of gaols and penal establishments, also the operations of the various offices connected with the Supreme and District Courts. He administers Acts of Parliament relating to justices, juries, coroners, prisons and prisoners, landlords and tenants, inebriates, real property, land titles, registration of firms, companies and deeds, births, deaths and marriages, and licensed trades and callings.

## SUPREME COURT.

The Supreme Court of New South Wales was established in 1824 under the Charter of Justice. Jurisdiction is exercised by a Chief Justice and not more than nine Puisne Judges, of whom four are engaged usually in the Common Law and Criminal jurisdictions, and the remainder in Equity, Bankruptcy, Probate, Lunacy, and Matrimonial Causes.

The Court possesses original jurisdiction over all litigious matters arising in the State, except where its jurisdiction is excluded by statute, in certain cases where extra territorial jurisdiction has been conferred, in Admiralty, and in appeal. Its original jurisdiction is exercised usually by one judge. The procedure and practice of the Court are defined by statute, or regulated by rules which may be made by any three or more judges. The Supreme Court has power at common law to restrain inferior courts which act in excess of their jurisdiction, and to grant mandamus to enforce a legal right. The right of appeal to the Supreme Court from inferior courts is purely the creation of statute law. In proper cases appeals may be carried from findings of the Supreme Court to the High Court of Australia or to the Privy Council.

Particulars are given below of each division of the civil jurisdiction of the Court.

*Common Law Jurisdiction.*

The jurisdiction of the Supreme Court at Common Law extends to cases not falling within any other jurisdiction. Actions are tried usually in the first instance in sittings at nisi prius, before one judge and a jury of four, or of twelve in special cases. A jury may be dispensed with by consent of both parties and under statutes governing certain cases. A judge may sit "in chambers" to deal with questions not requiring to be argued in court.

The following table gives particulars of causes set down and writs issued in the Supreme and Circuit Courts (Common Law Jurisdiction) during the last five years. The number of writs issued includes cases which were settled by the parties without further litigation.

Particulars.	1932.	1933.	1934.	1935.	1936.
Writs Issued ... ..	4,907	4,734	4,439	4,228	4,389
Judgments Signed ... ..	2,654	2,706	2,423	2,162	2,184
Causes Tried—					
Verdict for Plaintiff ... ..	154	172	167	202	198
"    Defendant ... ..	63	49	57	77	85
Jury Disagreed ... ..	2	1	3	1	1
Nonsuits ... ..	18	26	11	23	12
Total ... ..	237	248	238	303	296
Causes—					
Not proceeded with ... ..	315	206	213	237	241
Referred to Arbitration... ..	...	...	...	...	...
Total Causes dealt with ... ..	552	454	451	540	537

Litigation in this jurisdiction, as indicated by the number of writs issued, has decreased since 1932. The difference between the number of writs issued and judgments signed indicates the extent to which suits are not proceeded with, and the difference between the number of judgments signed and the number of causes tried indicates the extent to which cases are settled without legal proceedings in court.

*Equity Jurisdiction.*

The jurisdiction of the Supreme Court in Equity (which includes infancy) is exercised by the Chief Judge in Equity, or by any other Judge of the Supreme Court sitting in Equity. The procedure of the Court is governed by the Equity Act, 1901, and subsidiary rules. The jurisdiction extends to granting equitable relief by enforcing rights not recognised at Common Law and by special remedies such as the issue of injunctions, writs of specific performance, and a jurisdiction in infancy. The Court in making binding declarations of right may obtain the assistance of specialists such as actuaries, engineers, or other persons. In deciding legal rights incidental to its cases, it exercises all the powers of the Common Law jurisdiction of the Supreme Court, and may award damages in certain cases.

The office of the Court is under the control of the Master in Equity who performs many judicial functions, and, when directed by the Court, determines certain matters such as conducting inquiries, taking accounts, etc. He is also Registrar of the Court, and controls the records and funds within its charge.

The transactions in Equity during the year ended 30th June, 1936, included the following:—Decrees 107, orders on motions and petitions 1,288, orders by Judge in Chambers 324, and Master's orders 3. In 1935, 91 decrees, 1,179 orders on motions and petitions, and 324 orders by Judge in Chambers and 6 Master's orders were made.

*Lunacy Jurisdiction.*

The Supreme Court in its Lunacy jurisdiction is constituted, except on appeal, by the Chief Judge in Equity or by any other judge sitting for him during his absence or illness or at his request. In respect of the administration of estates the jurisdiction may be exercised by the Master in Lunacy and the Deputy Master in Lunacy.

Persons whose affairs are brought under control by the Lunacy Act are grouped in three main classes—(1) persons of unsound mind and incapable of managing their affairs; (2) persons who are incapable of managing their affairs through mental infirmity arising from disease or age; and (3) insane patients in the mental hospitals. The affairs of those in the first class are administered by committees, and those in the second class by managers, subject in both cases to the order and direction of the Court constituted by the Master; the affairs of insane persons are administered by or under the supervision of the Deputy Master in Lunacy.

The amount of Trust funds of insane persons and patients controlled by the Master in Lunacy at 30th June, 1935, was £1,143,610, and £1,231,066 at 30th June, 1936. In 1934-35 and 1935-36, respectively, the funds comprised mortgages £174,825 and £173,691, Commonwealth Government securities £691,905 and £683,795, fixed deposits £247,040 and £331,361, cash £7,681 and £19,725, Commonwealth Savings Bank deposits £22,159 and £22,494. In addition there were assets of considerable value in the form of scrip, real estate, etc. A deduction ranging up to 4 per cent. from the net income of insane persons and patients whose estates are managed by the Master in Lunacy amounted in 1934-35 to £3,916, and the fees collected to £244. Deductions made in 1935-36 amounted to £3,121, and fees collected to £270.

*Probate Jurisdiction.*

Probate jurisdiction extends over all property, real or personal, in New South Wales of deceased persons, testate or intestate. The jurisdiction is exercised by a Probate Judge, or by any judge acting on his behalf. By

probate rule of 18th October, 1906, the Registrar in Probate exercises jurisdiction in granting probate and letters of administration in all matters where no contention has arisen and in passing the accounts of executors and administrators, including the allowance of commission to them for their trouble. The Registrar or any interested party may refer any matter to the Court. The Registrar also exercises jurisdiction in minor dealings affecting estates where no objection is raised by any interested party.

Until the granting of probate or letters of administration the property of deceased persons vests in the Public Trustee, and cannot be legally dealt with except in minor matters. In this way the rights of the successors, the creditors, and the State are safeguarded. Cases of disputed wills are tried by the Judge, with or without a jury, to determine issues of fact, and jurisdiction is exercised over administrators and executors.

The following table shows the number and values of estates dealt with in the past five years:—

Year.	Probates Granted.		Letters of Administration.		Total.	
	Number of Estates.	Gross Value of Estates.	Number of Estates.	Gross Value of Estates.	Number of Estates.	Gross Value of Estates.
		£		£		£
1932	4,900	19,705,399	2,546	2,399,712	7,446	22,105,111
1933	5,281	20,225,220	2,211	2,614,996	7,492	22,840,216
1934	5,603	21,320,509	2,180	2,409,842	7,782	23,730,351
1935	5,861	22,696,050	2,745	2,759,547	8,606	25,455,597
1936	5,188	24,669,041	3,228	2,670,454	8,416	27,349,495

The values shown above represent the gross value of estates, inclusive of those not subject to duty, and of estates dealt with by the Public Trustee. In some cases probate or letters of administration are taken out a second time and such estates are duplicated in the foregoing figures. Where estates are less than £300 in value probate or letters of administration may be granted on personal application to the Registrar, without the intervention of a solicitor.

#### *Jurisdiction in Matrimonial Causes (Divorce).*

This jurisdiction was conferred on the Supreme Court by the Matrimonial Causes Act, 1873. Previously marriages could be dissolved only by special Act of Parliament. This Act, with its amendments, was consolidated in 1899. A Judge of the Supreme Court is appointed Judge in Divorce, but any other judge may act for him. The forms of relief granted are dissolution of marriage, judicial separation, declaration of nullity of marriage, jactitation of marriage, and orders for restitution of conjugal rights. Orders for the custody of children, alimony, damages, and settlement of marriage property may be made. Decrees for the dissolution of marriage are usually made provisional for a short period, and absolute at the expiration thereof if no reason to the contrary is shown, *e.g.*, collusion. Where there is reason to believe that dissolution of marriage is sought for ulterior motives and that collusion has taken place between the parties, it is customary for the Crown to intervene and place before the Court any relevant facts in its possession. The Crown, however, cannot intervene after the *decree nisi* has been made absolute.

The grounds on which dissolution may be granted on petition and the conditions as to domicile have been set out in previous issues of this Year Book.

The following statement shows the number of petitions in matrimonial causes made and granted in New South Wales during the past five years in comparison with the average per year in quinquennial periods since 1908:—

Year.	Petitions for Divorce, Judicial Separation, and Nullity of Marriage Lodged.	Number of Petitions Granted.					Restitution of Conjugal Rights.	
		Divorces.		Petitions for Judicial Separation Granted.	Nullity of Marriage.		Petitions.	Decrees granted.
		Decrees <i>Nisi</i> Granted.	Decrees <i>Nisi</i> made Absolute.		Decrees <i>Nisi</i> Granted.	Decrees <i>Nisi</i> made Absolute.		
1908-12*	453	260	267	12	4	4	28	18
1913-17*	642	393	342	9	3	3	74	51
1918-22*	1,041	672	562	13	7	5	236	141
1923-27*	1,391	992	903	13	9	8	266	168
1928-32*	1,480	1,030	967	19	11	9	311	180
1932	1,516	1,060	846	17	9	7	330	189
1933	1,611	1,089	1,008	22	9	6	333	234
1934	1,780	1,132	1,078	13	16	14	386	196
1935	1,728	1,127	1,124	15	9	9	343	188
1936	1,814	1,367	1,147	12	15	13	352	234

\* Average per year.

The number of petitions lodged in *forma pauperis* during 1936 was 942, of which 812 were for divorce, 4 for nullity of marriage, 12 for judicial separation, and 114 for restitution of conjugal rights.

The number of petitioners of each sex in cases where decrees for divorce or nullity of marriage were made absolute, or judicial separation was granted, during each of the past ten years was as follow:—

Year in which Petition was granted.	Number of Successful Petitions lodged by			Year in which Petition was granted.	Number of Successful Petitions lodged by		
	Husband.	Wife.	Total.		Husband.	Wife.	Total.
1927	421	667	1,088	1932	362	508	870
1928	373	554	927	1933	429	607	1,036
1929	429	666	1,095	1934	451	654	1,105
1930	396	555	951	1935	466	682	1,148
1931	443	647	1,087	1936	505	687	1,172

The proportion of the petitions lodged by husbands is about 40 per cent.

The grounds of suits in which decrees for divorce or nullity of marriage were made absolute during each of the past five years were as follow:—

Ground of Suit.	1932.	1933.	1934.	1935.	1936.
Adultery ... ..	226	223	246	256	267
Bigamy ... ..	6	4	15	11	9
Cruelty and Repeated Assaults ... ..	7	5	2	3	6
„ „ Habitual Drunkenness ... ..	14	8	7	11	8
Desertion ... ..	450	593	609	638	685
Habitual Drunkenness and Neglect to Support, or Neglect of Domestic Duties ... ..	14	17	20	16	15
Non-compliance with Order for Restitution of Conjugal Rights ... ..	131	150	190	141	160
Other ... ..	5	6	3	7	9
Total ... ..	853	1,014	1,692	1,133	1,160

In the 1,147 cases in which decrees for divorce were made absolute during 1936 the mean duration of marriage was as follows:—Under 5 years, 41; 5-9 years, 335; 10-14 years, 348; 15-19 years, 197; 20-29 years, 187, 30-39 years 38; and 40-50 years, 1. In the cases of 340 marriages there were no children; one child in 385 cases; two children, 211; three children, 101; four children, 54; and five or more children in 51 cases. In 5 cases the details were not stated.

#### *Admiralty Jurisdiction.*

Jurisdiction as a Colonial Court of Admiralty was conferred on the Supreme Court of New South Wales on 1st July, 1911, by Order-in-Council, under the Colonial Courts of Admiralty Act (Imperial), 1890. The Court may sit also as a Prize Court by authority of a proclamation of August, 1914, under the Prize Courts Act (Imperial), 1894.

#### HIGHER CRIMINAL COURTS.

The higher courts of criminal jurisdiction consist of the Central Criminal Court (which sits in Sydney and is presided over by a Judge of the Supreme Court), of the Supreme Court on circuit, and of Courts of Quarter Sessions held at important centres throughout the State, each presided over by a Judge of the District Court as chairman of Quarter Sessions. These courts deal with indictable offences which are the more serious criminal cases. Offences punishable by death may be tried only before the Central Criminal Court, which exercises the criminal jurisdiction of the Supreme Court, or before the Supreme Court on circuit.

All persons charged with criminal offences must be charged before a judge with a jury of twelve chosen by lot from a panel provided by the sheriff. The question of the guilt or innocence of the accused is determined by the jury after the direction by the presiding judge as to the law and the facts proved by evidence and its verdict must be unanimous. If unanimity is not reached within twelve hours, the jury is discharged and the accused may be tried before another jury. Women are not eligible to act as jurors.

Indictable offences against Commonwealth law are tried before these courts.

#### *Central Criminal Court and Supreme Court on Circuit.*

The Central Criminal Court exercises the criminal jurisdiction of the Supreme Court in Sydney, and a Judge of the Supreme Court presides at sittings of the Supreme Court in circuit towns. Usually capital offences, the more serious indictable offences committed in the metropolitan area, and offences which may not be tried conveniently at Quarter Sessions, or at sittings of the Supreme Court in the country, are tried at the Central Criminal Court. Appeal from these courts lies to the Court of Criminal Appeal, consisting of three or more Judges of the Supreme Court and, in proper cases, to the High Court of Australia or the Privy Council. A Judge of the Supreme Court sitting in Sydney or in circuit courts may act

as a Court of Gaol Delivery, to hear and determine the cases of untried prisoners upon returns of such prisoners supplied by the gaolers of the State under rules of the Court.

### *Courts of Quarter Sessions.*

These courts are held at times and places appointed by the Governor-in-Council, in districts which coincide with those of District Courts. Forty-three places were appointed in 1936, courts being held usually prior to District Court sittings, from two to four times a year in country centres, but eleven times in Sydney, and eight times in Parramatta.

In addition to exercising their original jurisdiction, the courts hear appeals from Courts of Petty Sessions and certain appeals from other courts, *e.g.*, Licensing Courts. Appeals from Quarter Sessions by person convicted on indictment are heard by the Court of Criminal Appeal.

### *Cases before Higher Criminal Courts.*

The following table relates to the number of distinct persons charged before Courts of Quarter Sessions, sittings of the Supreme Court at circuit towns, and the Central Criminal Court, and it shows the number convicted for each of the classes of more serious offences. Where two or more charges were preferred against the same person, account has been taken only of the principal charge.

Year ended 30th June.	Distinct Persons Charged.	Not Guilty, etc.	Convictions—Principal Offence.					Total Persons Convicted	
			Against Person.	Against Property.	Against Currency, and Forgery.	Other Offences.	Number.	Per 10,000 of Popula- tion.	
1911*	979	441	141	313	48	36	538	3.23	
1921*	1,722	611	166	853	48	44	1,111	5.27	
1931	1,711	503	170	977	36	25	1,208	4.75	
1932	1,597	458	162	892	48	37	1,139	4.44	
1933	1,501	477	132	795	41	56	1,024	3.95	
1934	1,287	432	153	630	37	35	855	3.27	
1935	1,191	329	153	640	38	31	862	3.27	
1936	1,084	318	179	523	19	45	766	2.88	

\* Year ended 31st December.

In view of the facts that trials of accused persons in higher criminal courts take place on indictment by the Attorney-General, and usually after magisterial inquiry into the sufficiency of evidence for such trials, and that the question of guilt is decided by a jury of laymen, it is interesting to note that only about two-thirds of the persons charged are convicted, and in the case of offences against the person the proportion is approximately one-half.

Of the persons convicted during the year ended 30th June, 1936, the males numbered 744 and females 22. In 1934-35 the distribution of convictions according to sex was males 832, females 30; and the proportion per 100,000 of each sex was males 62, females 2.3.

The following table shows the number of persons convicted for specific offences included in the foregoing statement:—

Offences.	Number of Offenders Convicted.				
	1911	1921.	1933-34	1934-35.	1935-36.
Murder ... ..	3	8	2	3	10
Attempted Murder and Shooting at with Intent	3	3	4	5	3
Manslaughter ... ..	4	13	5	6	11
Rape and other Offences against Females ...	29	21	42	48	58
Unnatural Offences ... ..	2	23	19	24	29
Abortion and Attempts to Procure... ..	3	2	...	1	2
Bigamy .. ..	16	22	28	15	14
Assault ... ..	80	63	13	17	14
Burglary and Housebreaking ... ..	62	244	353	364	322
Robbery and Stealing from the Person ...	14	35	29	55	29
Stealing Horses, Cattle, Sheep ... ..	26	48	7	5	1
Embezzlement and Stealing by Servants ...	26	42	22	7	20
Larceny and Receiving ... ..	131	376	123	124	74
Fraud and False Pretences ... ..	38	80	41	58	39
Arson ... ..	...	1	6	7	8
Forgery, Uttering Forged Documents ...	41	44	16	20	11
Conspiracy ... ..	10	16	15	11	24
Perjury and Subornation .. ..	10	17	5	11	3

In so far as the number of persons convicted indicates the prevalence of crime, the above statement shows that during post-war as compared with pre-war years, the increase in crime occurred principally in burglary and housebreaking. On the other hand considerable decreases took place in the number of assaults and cases of forgery.

#### DISTRICT COURTS.

District Courts have been in existence in New South Wales since 1858 as intermediaries between the Small Debts Courts and the Supreme Court. They are presided over by judges with special legal training, whose jurisdiction is defined in the District Courts Act, 1912-1936. Sittings are held at places and times appointed by the Governor-in-Council. There are nine District Court Judges and arrangements were made for sittings in sixty-three districts in 1936. The courts sit at intervals during ten months of the year in Sydney, and two or more times per year in important country towns. A registrar and other officers are attached to each court.

Ordinarily cases are heard by a judge sitting alone, but a jury may be empanelled by direction of the judge, or upon demand by either plaintiff or defendant, in any case where the amount claimed exceeds £20. The jurisdiction of the Court extends over issues of fact in equity, probate, and divorce proceedings remitted by the Supreme Court, and over actions at Common Law involving an amount not exceeding £400, or £200 where a title to land is involved.

The findings of the District Court are intended to be final, but new trials may be granted, and appeals may be made to the Supreme Court in certain cases.

Particulars of suits brought in District Courts in their original jurisdictions during the last five years are given in the following table:—

Year.	Causes Tried.		Causes Discontinued or Settled without hearing.	Judgment for Plaintiff by Default, Confession, or Agreement.	Causes referred to Arbitration.	Total Suits disposed of.	Total Suits arising during Year.	Causes Pending and in Arrear.
	Verdict for Plaintiff.	Verdict for Defendant (including Nonsuit, etc.).						
1932	1,228	343	2,856	6,438	...	10,865	10,060	4,639
1933	1,087	329	2,779	6,652	...	10,847	10,662	4,454
1934	832	350	3,987	5,855	1	11,005	9,799	3,248
1935	926	333	2,986	5,775	...	10,020	10,737	3,905
1936	920	346	2,955	6,157	...	10,378	10,556	4,143

Of the causes tried during 1936, 146 were tried by jury and 1,120 without a jury. The amount of judgment for plaintiffs during the year was £325,885.

In addition to the suits covered by the foregoing table a considerable amount of work is done in the District Courts under various Acts.

#### LAND AND VALUATION COURT.

The Land Court of Appeal, established originally in 1889, was re-constituted at the close of 1921, as the Land and Valuation Court. This court is presided over by a judge, whose status is equal to that of a Judge of the Supreme Court, and who may sit as an open court at such places as he determines, with two assessors in an advisory capacity. The procedure of the court is governed by rules made by the Judge, who also exercises powers over witnesses and the production of evidence similar to those of a Judge in the Supreme Court. On questions of fact the decisions of the Judge are final, but appeal may be made to the Supreme Court against his decision on points of law.

The Court exercises original jurisdiction in: (a) claims for compensation arising out of resumption by public authorities or for damages caused by the execution of authorised works; (b) registration of land agents and their charges; (c) and determination of certain rentals under the Landlord and Tenant Act. The Court also exercises appellate jurisdiction in respect of (a) appeals from the decisions of the local land boards under the Crown Lands Acts, Pastures Protection Acts and kindred Acts; (b) all valuations by the Valuer-General; (c) all valuations by rating authorities including the City Council where the valuation exceeds £5,000; (d) claims for compensation in respect of delicensed premises; (e) claims for compensation under the Mines Subsidence Act; (f) and appeals under the Reclamation Act.

#### WORKERS' COMPENSATION COMMISSION.

A special and exclusive jurisdiction was conferred on the Workers' Compensation Commission to determine all questions arising under the Workers' Compensation Act, which came into force on 1st July, 1926, and its amendments. The Commission is a body corporate, with perpetual succession, and consists of a barrister of five years standing, appointed as chairman with the same status, salary, and rights as a District Court Judge, together with two members appointed for a period of seven years and representing employers and employees respectively. A medical referee may be summoned to sit as assessor with the Commission.

The Chairman alone decides points of law, but, on questions of fact the decision of the Commission is that of a majority of its members. Either the chairman or a majority of the Commission may refer any question of law for the decision of the Supreme Court by way of stating a case, but the determinations of the Commission on matters of fact are final, and may not be challenged in any court. An appeal by way of case stated on question of law, lies to the Supreme Court and from the Supreme Court to the High Court of Australia and the Privy Council.

For the purpose of conducting its proceedings the Commission has the powers of a Commissioner under the Royal Commissions Act, 1923.

During the year 1935-36, the Commission in open Court dealt with 1,228 applications for determination regarding the liability of employers to pay compensation and in Chambers considered 1,275 applications by dependants of deceased workers, or by workers under a legal disability. In 1934-35, 1,352 applications were dealt with in open Court, and 1,193 applications were disposed of in Chambers. Further particulars relating to compensation are shown in the chapter relating to Employment.

#### COURTS OF MARINE INQUIRY.

Cases of shipwreck or casualty to British vessels, or the detention of any ships alleged to be unseaworthy, and charges of misconduct against officers of British vessels arising on or near the coast of New South Wales, or on any ship registered at or proceeding to any port therein, are heard by one or more authorised Judges of the District Court or Police or Stipendiary Magistrates sitting with two or more assessors as a Court of Marine Inquiry.

The proceedings of the Court are governed by the Navigation Acts of the State and Commonwealth.

#### INDUSTRIAL TRIBUNALS.

A system of industrial arbitration was inaugurated in 1901, when courts of law were established to determine certain disputes between employers and employees relating to working conditions. The system has been changed fundamentally from time to time, and the statutory basis of the present system is the Industrial Arbitration Act, 1912, with subsequent amendments. The Industrial Arbitration (Amendment) Act, 1926, substituted an Industrial Commission for the former Court of Industrial Arbitration as from 15th April, 1926.

There are four members of the Industrial Commission, as provided by the Industrial Arbitration (Amendment) Act passed in May, 1936, any three of whom may constitute the Commission. The Commission may delegate any of its powers or functions to any one member, but in such case an appeal lies to the Commission from the finding of such member. Members hold office during good behaviour and have the same status and rights as a puisne Judge of the Supreme Court. Persons eligible for appointment as a member of the Commission are puisne Judges of the Supreme Court, District Court Judges, barristers of five years standing, and solicitors of seven years standing. The Commission on any reference or application to it may make awards fixing rates of pay and working conditions in any industry to which the Act applies and has power to determine any "industrial matter," which by definition under the Act has wide application. It has authority to adjudicate in cases of illegal strikes, lockouts or unlawful dismissals, and may summon any person to a compulsory conference; to determine a standard of living and to declare the

living wage; to hold conferences regarding the settlement of any industrial matter; to hear appeals under the Act from determination of conciliation committees, the apprenticeship councils, the industrial registrar and industrial magistrates, and to exercise the powers of the Board of Trade under the Monopolies Act. It also has the powers, and may exercise the jurisdiction conferred by the Act on the industrial registrar and on industrial magistrates. By an amending Act, passed in 1932, the Commission is empowered to determine the standard hours to be worked in industries within its jurisdiction. There is a Conciliation Commissioner appointed for a term of seven years, who exercises powers formerly residing in conciliation committees. Additional conciliation commissioners may be appointed.

Conciliation committees may be established for various industries on the recommendation of the Industrial Commission, but the Conciliation Commissioner may sit with or without the members of the committee, to inquire into industrial matters and to make awards governing working conditions. If members sit with the Commissioner, they sit as assessors only and are without voting powers. The Commissioner has original jurisdiction in respect of industrial matters arising in industries in respect of which the Industrial Arbitration Act applies.

The Act of 1932 provided for the appointment of an Apprenticeship Commissioner, and he, and the members of the Conciliation Committee for an industry, constitute the apprenticeship council for that industry, with power to regulate wages, hours and other conditions of apprenticeship. The apprenticeship councils are given similar powers in respect of trainee apprentices by the amending Act of 1936.

Industrial magistrates are appointed under the Act of 1912, with jurisdiction over cases arising out of non-compliance with awards, and statutes governing working conditions of employees. Their powers are cognate with those of police magistrates.

Details of the constitution and operations of these tribunals are published in the chapter relating to "Industrial Arbitration."

#### TAXATION APPEALS.

The Income Tax (Management) Act, 1936, which commenced to function as from 18th November, 1936, provides for the constitution of a Board of Appeal consisting of three members of whom one is required to be a barrister or solicitor and one a public accountant, in each case of not less than seven years standing. The Board may hear and determine any appeal against a State assessment and its decision is final except where a question of law is involved, or in the case of a question of fact, where the Board certifies that the amount of tax in dispute exceeds the sum of three hundred pounds. In such a case appeal lies from the Board to the Full Supreme Court.

An appeal may be made direct to the Supreme Court against the decision of the Commissioner of Taxation on an objection to an assessment in any case, except where the taxpayer is dissatisfied with any opinion, decision or determination given by the Commissioner in the exercise of a discretion conferred upon him by statute. Appeals against the exercise of the Commissioner's discretion may be made to the Board of Appeal only. For the purpose of hearing appeals made direct to it, the Supreme Court consists of a single justice. There is no right of appeal to the Full Court, but the Court

may state a case for the opinion of the Full Supreme Court upon questions of law. There is an appeal to the High Court from any decision of the Supreme Court whether that decision is given by a single justice or by the Full Court.

Courts of Review established under previous Income Tax (Management) Acts ceased to function upon the commencement of the Income Tax (Management) Act, 1936, except for completely disposing of any part-heard appeals.

## LOWER COURTS OF CIVIL JURISDICTION.

### *Courts of Petty Sessions (Small Debts Court).*

A limited civil jurisdiction is conferred by the Small Debts Recovery Act, 1912-1933, on magistrates and justices sitting as Small Debts Courts to determine, in a summary way according to equity and good conscience, actions for the recovery of debt or damages. The jurisdiction of these courts is limited to cases involving not more than £50. A police or stipendiary magistrate may exercise the full jurisdiction of the court, two justices of the peace may hear cases involving amounts up to £30, and one justice up to £5. In cases of indefinite demands jurisdiction extends only to cases involving £10, or, by consent of the parties, up to £30, but the courts may not deal with matters involving titles to freehold or future rights.

In general, a decision of the court is subject to review only when it exceeds its jurisdiction or violates natural justice.

The principal officers of the court are a registrar, who acts as clerk to the bench and may enter judgment in cases of default of defence, or where claims are admitted and agreed upon, and such bailiffs as are appointed from time to time for the service and execution of process.

Particulars of the transactions of Small Debts Courts during the last five years are shown below:—

Year.	Plaints entered.	Verdicts for Plaintiff.		Executions issued.	Garnishee Orders issued.
		Number.	Amount.		
			£		
1932	58,384	30,864	318,348	10,445	4,677
1933	63,999	36,316	372,065	7,427	5,305
1934	61,171	37,253	384,909	7,516	6,391
1935	59,377	34,451	346,268	8,257	7,031
1936	62,239	36,901	399,391	8,874	8,855

In garnishee cases the Court may order that all debts due by a garnishee to the defendant may be attached to meet a judgment debt, and by a subsequent order, may direct the garnishee to pay so much of the amount owing as will satisfy the judgment debt. In respect of wages or salary, garnishee orders may be made only for so much as exceeds £2 per week. The garnishee cases numbered 7,031 in 1935 and 8,855 in 1936.

### *Licensing Courts.*

Under the Liquor Act of 1912 and amendments three persons, each of whom shall be a stipendiary or police magistrate, are appointed licensing magistrates and constitute the Licensing Courts for all the licensing districts of the State.

The licensing magistrates are empowered, with the approval of the Minister, to delegate either generally or in any special matter their jurisdiction to stipendiary or police magistrates. Under a general delegation applications for renewals, transfers, booth licenses and other minor matters are dealt with by such stipendiary or police magistrates.

The Licensing Court sits as an open court and appeals from its decisions lie to a Court of Quarter Sessions.

The three licensing magistrates also constitute the Licenses Reduction Board.

Particulars relating to the operations of the Licensing Courts and the Licenses Reduction Board are shown in the chapter entitled "Social Condition."

#### *Wardens' Courts (Mining).*

By virtue of the Mining Act, 1906, and amendments, mining wardens may hold courts to determine disputes within their districts as to the possession of mining lands, or claims under mining contracts. In general their procedure is summary, and their decisions final, but appeal lies in certain cases to a District Court sitting as a Mining Appeal Court or, on points of law, by way of stating a case to the Supreme Court.

#### *Land Boards.\**

Local Land Boards each consisting of a salaried chairman, usually possessing legal and administrative experience, and of two other members (paid by fees) possessing local knowledge, were first appointed under the Crown Lands Act of 1884. These boards sit as open courts, and follow procedure similar to that of Courts of Petty Sessions. Their functions are to determine questions under the Crown Lands Acts, and other matters referred by the Minister. Sittings are held as required at appointed places in each of twelve Land Board Districts in the Eastern and Central Divisions of the State. There are also special Land Boards for the Yanco, Mirrool, and Ccomealla Irrigation Areas.

The management and control of Crown Lands in the Western Division of the State is vested in a Commissioner. Land Boards consisting of a salaried chairman and one other member (paid by fees) function similarly to those in the other territorial divisions.

#### *Fair Rents Courts.*

These courts were established under the Fair Rents Act, 1915, for the regulation of the rents of dwellings let at a rental not exceeding the rate of £3 per week. The jurisdiction was extended in 1926 to retail shops at rentals not exceeding £6 per week, but it was curtailed by an amendment passed in 1928, which provided also that the Fair Rents Act would cease to have effect on 1st July, 1933.

Particulars of the operations of the Courts were published in the chapter "Food and Prices" of the Year Book for 1931-32 at page 721.

### LOWER COURTS OF CRIMINAL AND QUASI-CRIMINAL JURISDICTION.

#### *Courts of Petty Sessions (Police Courts).*

These Courts are held daily in large centres, and periodically, as occasion demands, in small centres. They operate under various statutes (chiefly the Crimes Act, 1900, Police Offences Act, 1901-1936, and Vagrancy Act, 1902), which describe the nature of offences, penalties, and certain procedure, and prescribe the number of justices or magistrates for the trial of various

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\* See chapter on Land Legislation and Settlement.

offences. Cases are heard by a Stipendiary Magistrate in the Sydney, Broken Hill, Parramatta, Newcastle, Bathurst, Windsor, Richmond, and Wollongong Districts, and in other districts by a Police Magistrate or by Justices of the Peace. The procedure is governed in a general way by the Justices Act, 1902, and its amendments. These courts deal with minor offences, which may be treated summarily, while charges for indictable offences are investigated, and the accused committed for trial to higher courts when a *prima facie* case is made out.

Offences punishable summarily by Courts of Petty Sessions include most offences against good order and breaches of regulations. Certain indictable offences may be dealt with summarily with the consent of the accused. Certain indictable offences, where the value of the property in respect of which the offence is charged does not exceed ten pounds, may be dealt with summarily without the consent of the accused. The courts deal also with certain other cases, such as proceedings arising under the Master and Servants Act, the Deserted Wives and Children Act, Child Welfare Act, and administrative regulations.

Reference to the right of appeal to Quarter Sessions is made on page 327.

#### *Children's Courts.*

Children's Courts were established by proclamation under the Infant Protection Act, 1904, and the Neglected Children and Juvenile Offenders Act, 1905, which were consolidated with other enactments by the Child Welfare Act, 1923. Each court consists of a special magistrate with jurisdiction within a proclaimed area. Elsewhere the jurisdiction of a court may be exercised by a special magistrate, or two Justices of the Peace. The magistrates exercise all the powers of a Police or Stipendiary Magistrate in respect of cases involving children as parties or witnesses to the exclusion of ordinary courts of law. At any hearing or trial before a Children's Court, persons not directly interested in the case are excluded from the court room. By these means children are protected against the adverse influences which they would encounter in the ordinary courts.

The jurisdiction embraces proceedings concerning maintenance of infants, offences by or against children, and neglected or uncontrollable children. Matters arising under the Deserted Wives and Children Act, *e.g.*, complaints for wife maintenance, are also determined by the Children's Court. The Court is endowed with extensive powers, such as the committal of children to reformatory homes, release on probation, etc.

Appeal from its decision lies in proper cases to the Supreme Court, Quarter Sessions, or in certain circumstances to a District Court.

Separate statistics of the proceedings of Children's Courts are not available, as they are included with those of ordinary Courts of Petty Sessions.

#### *Cases before Magistrates' Courts.*

Particulars of the number of offences charged, and convictions obtained in Courts of Petty Sessions and Children's Courts, are shown below. Except where otherwise stated the figures represent the total number of offences charged, and where multiple charges are preferred at the same time, separate account is taken of each. The figures should not be used for the purpose of comparison with other States or countries, unless the same rules are observed in tabulating the statistics of crime. They are not comparable,

for instance, with the statistics of Magistrates' Courts in the States of Victoria, South Australia, and Western Australia, where an accused person charged with a number of offences at the same time is counted once only:—

Year.	Offences Charged.				Per cent.		
	Withdrawn or Discharged.	Convicted.	Committed to Higher Courts.	Total.	With-drawn.	Con-victed.	Com-mitted to Higher Courts.
1911	8,878	65,058	1,178	75,114	11·8	86·6	1·6
1921	11,877	80,214	2,594	94,685	12·6	84·7	2·7
1931	17,317	101,675	2,751	121,743	14·2	83·5	2·3
1932	20,237	93,860	2,244	116,341	17·4	80·7	1·9
1933	23,857	100,075	2,202	126,134	19·0	79·3	1·7
1934	22,210	104,018	1,732	127,960	17·3	81·3	1·4
1935	23,017	110,135	1,748	134,900	17·1	81·6	1·3
1936	25,597	117,490	1,620	144,707	17·7	81·2	1·1

Toward the end of 1916 provision was made whereby persons arrested for drunkenness were allowed to forfeit a deposit (nominally bail) in lieu of appearing in court. The amount was originally fixed at 5s., the usual penalty imposed, but it has been increased to 10s. Approximately one-third of the cases of drunkenness are dealt with in this manner, and they are included in the statistics as convictions, as well as those cases where the offender is admonished and set free without penalty.

It is not possible to determine the number of distinct persons charged in each year, as particulars obtained from persons accused of minor offences, particularly vagrants, do not form a reliable basis for identification.

Only a small proportion of the offences for which summary convictions are effected are really criminal offences, that is, offences against person or property. The following table shows a classification of the offences for which summary convictions were recorded, also the rate per 1,000 of mean population:—

Year.	Number of Convictions for Minor Offences.					
	Against the Person.	Against Property.	Against Good Order		Other Offences.	Total Summary Convictions.
			Drunkenness.	Other.		
1911	1,664	3,404	29,299	14,886	15,805	65,058
1921	2,127	5,924	28,702	18,086	25,375	80,214
1931	1,849	11,708	20,559	15,698	51,961	101,675
1932	1,993	10,104	21,510	15,057	45,196	93,860
1933	1,606	9,454	25,421	14,026	49,568	100,075
1934	1,546	10,305	26,344	12,889	52,934	104,018
1935	1,677	10,368	27,823	13,548	56,719	110,135
1936	1,504	11,660	30,267	12,502	61,557	117,490
Number per 1,000 of Mean Population.						
1911	1·00	2·04	17·60	8·94	9·49	39·07
1921	1·01	2·81	13·61	8·58	12·04	38·05
1931	0·72	4·58	8·04	6·10	20·34	39·78
1932	0·77	3·92	8·34	5·84	17·52	36·39
1933	0·62	3·63	9·77	5·39	19·05	38·46
1934	0·59	3·93	10·04	4·91	20·18	39·65
1935	0·63	3·92	10·52	5·12	21·44	41·63
1936	0·56	4·37	11·35	4·69	23·07	44·04

There has been a marked increase in convictions classified under the heading "other offences," which consist mainly of breaches of administrative law, *e.g.*, traffic regulations and local government by-laws. A large proportion are minor breaches or are committed through inadvertence or in ignorance of the law, and are met with the infliction of a fine. As local and other administrative activities have been extended, it is a natural corollary that such offences should become more numerous. Thus the convictions under the traffic regulations have increased to such an extent that in recent years they have represented half or more of the offences classified in this group, and the number in 1936 was 31,034, as compared with 4,192 in 1921. Over the same period, however the number of registered motor vehicles has increased from 44,443 to 275,803. Excluding offences of this class, the number of convictions per 1,000 of population in 1936 was 10.1 per cent. lower than in 1921. There has been an increase in summary convictions for offences against property, the number in 1936 being higher than in the preceding four years. The number of convictions for drunkenness in 1931 was the lowest since 1919. The number was higher in the following five years, and in 1936 the proportion was 5.5 per cent. higher than in 1921.

#### *Coroners' Courts.*

The office of Coroner was established in New South Wales by letters patent in 1787, and is regulated by the Coroners Act, 1912, which consolidated previous laws.

Every Stipendiary or Police Magistrate has the powers and duties of a coroner in all parts of the State, except the Metropolitan Police District, which is under the jurisdiction of the City Coroner. In districts not readily accessible by Police Magistrates, a local resident, usually a Justice of the Peace, is appointed coroner.

At the discretion of the Coroner, inquiries are held into the causes of violent or unnatural deaths, into the causes of deaths in gaols or in mines, and into the origin of fires causing damage or destruction to property, but inquiries as to cause of deaths may be dispensed with where the Coroner deems inquiry unnecessary. The Coroner may order the attendance of any medical practitioner at the inquest, and may direct him to hold a post-mortem examination. On the evidence submitted the Coroner is empowered to commit for trial persons adjudged guilty of manslaughter, murder, or arson, and in such cases may grant bail.

In certain cases a jury of six persons may be empanelled to find as to the facts of the case, and on their verdict against any person he may be committed for trial. The instructions to coroners provide that an inquest should be held into the cause of every death occurring among prisoners in gaols and lock-ups. In such cases a jury of six freemen and six prisoners is empanelled. Persons apprehended by the police subsequent to the decisions of coroners are charged in the Courts of Petty Sessions.

During 1936, 21 persons were committed for trial by coroners on charges of murder, 47 for manslaughter, and 16 for arson. The corresponding figures for the year 1935 were:—Murder, 20; manslaughter, 44; and arson, 16.

The coroners held inquiries into the origin of 120 fires in 1936, and found that 26 fires were accidental, 39 were caused wilfully, 1 was due to carelessness, and in 54 cases the evidence was insufficient to indicate the origin. The inquiries in 1935 related to 113 fires and there were verdicts of arson in 23 cases and accident in 25 cases.

## APPELLATE JURISDICTION.

Generally speaking, appellate jurisdiction is exercised, in cases where appeals are authorised by statute, by Courts of Quarter Sessions from Magistrates' Courts, by the Supreme Court from District Courts and Magistrates' Courts, by the High Court of Australia from the Supreme Court, and (in certain cases) by the Privy Council from either of the two last-named courts. Appeal on points of law (usually by stating a case) may be made to the Supreme Court from special courts, *e.g.*, Industrial Commission and Workers' Compensation Commission.

A Court of Criminal Appeal, presided over by Judges of the Supreme Court, was established in 1912.

*Appeals to Quarter Sessions.*

The right of appeal from Courts of Petty Sessions to Courts of Quarter Sessions lies against all convictions or orders by magistrates, excepting adjudication to imprisonment for failure to comply with an order for the payment of money, for the finding of sureties for entering into a recognizance or for giving security. The Appeal Court rehears the cases, deciding questions of fact as well as of law.

*Appeals to the Supreme Court.*

Three or more Judges of the Supreme Court may sit in its various civil jurisdictions to hear appeals from District Courts or from decisions of justices in chambers, and to consider motions for new trials and kindred matters, or to hear appeals from orders and decrees made by one justice in the various jurisdictions of the court. One judge may sit in chambers to hear applications for writs of mandamus or prohibition, and to determine special cases stated by magistrates. Reference is made on page 321 to the jurisdiction of the Supreme Court in regard to appeals from the Taxation Board of Appeal and against the decision of the Commissioner of Taxation.

*Court of Criminal Appeal.*

The Court of Criminal Appeal was established by the Criminal Appeal Act of 1912, which prescribes that the Supreme Court shall be the Court of Criminal Appeal, constituted by three or more Judges of the Supreme Court as the Chief Justice may direct. Any person convicted on indictment may appeal to the Court against his conviction (1) on any ground which involves a question of law alone, or (2) with the leave of the Court or upon the certificate of the judge of the court of trial, on any ground which involves a question of fact alone, or of mixed law and fact, or any other ground which appears to the Court to be sufficient. With the leave of the Court, a convicted person may appeal also against the sentence passed on conviction. In such appeal the Court may quash the sentence and substitute another either more or less severe. The Attorney-General may appeal to the Court against a sentence pronounced by the Supreme Court or any Court of Quarter Sessions.

In addition to determining appeals in ordinary cases the Court has power, in special cases, to record a verdict and pass a sentence in substitution for the verdict and sentence of the Court of trial. It also may grant a new trial, either on its own motion or on application of the appellant.

*Appeals to the High Court of Australia.*

Appeal to the High Court of Australia from judgments of the Supreme Court of New South Wales may be made in any case by permission of the High Court, and as of right in cases involving a matter valued at £300 or

more, or involving the status of any person under laws relating to aliens, marriage, divorce or bankruptcy, provided that appeal lay to the Privy Council in such case at the date of establishment of the Commonwealth. Such appeal may be made even if a State law provides that the decision of the Supreme Court is final.

An appeal to the High Court from the Court of Criminal Appeal may be made by special leave of the High Court.

#### *Appeals to the Privy Council.*

Appeals from Dominion Courts to the Crown-in-Council are heard by the Judicial Committee of the Privy Council by virtue of the royal prerogative to review decisions of all Courts of the Dominions, which can be limited only by Act of Parliament.

The cases which may be heard on appeal by the Judicial Committee were defined by Order-in-Council in 1909. Appeal may be made as of right from determinations of the Supreme Court involving any property or right to the value of £500 or more, and as of grace from the Supreme or High Court in any matter of substantial importance, including criminal cases in special circumstances. Except where the High Court consents no appeal may be made to the Privy Council upon any question as to the limits *inter se* of the constitutional powers of the Commonwealth or States.

#### JURY SYSTEM.

Crimes and misdemeanours prosecuted by indictment in the Supreme Court or Courts of Quarter Sessions must be tried before a jury of twelve persons, who find as to the facts of the case, the punishment being determined by the judge. Most civil cases may be tried before a special jury of four persons, or a jury of twelve persons, upon application and with the consent of the court. The jury in such cases determines questions of fact and assesses damages. The procedure in relation to juries is governed principally by the Jury Act, 1912, and its amendments, and other Acts regulate special cases.

Persons liable to service on juries include, with certain exceptions, any man above the age of 21 years residing in New South Wales, and having a clear yearly income of £30 or more from real and personal estate, or a real and personal estate of the value of £300 or more. The principal exceptions are foreign subjects, who have not resided in New South Wales for at least seven years, and certain persons attainted of treason or felony. Men specially exempt include judges, members of Parliament, certain public officers, officers of the public service of the Commonwealth, members of the defence forces, employees of the State Governments, clergymen, barristers, solicitors, magistrates, police officers, doctors, dentists, chemists, schoolmasters, certain employees of banks, incapacitated persons, and men above the age of 60 years who claim exemption. Women are not eligible to act as jurors.

A jurors' list is compiled annually in October for each Petty Sessions District by the senior police officer. This list is made available for public inspection, and revised in December before a magistrate. Lists of persons qualified and liable to serve on special juries are prepared also. They include persons of prescribed avocations.

The jurors summoned to hear an issue are decided by lot. Accused persons and the Crown each have the right to challenge eight jurors in criminal cases, and twenty in capital cases, without assigning reasons. In civil cases not more than four times the number of jurors required may be

summoned, and in striking the jury to try the case twice the number required are drawn from those summoned and one-fourth of that number is struck off by each party to the case.

In criminal cases the verdict of the jury must be unanimous. Where agreement is not reached within twelve hours, the jury may be discharged, and the accused tried before another jury. In civil cases the verdict of three-fourths of the jury may be accepted after six hours' deliberation, but failing agreement within twelve hours, the jury is discharged and a new trial held.

#### JUDGES, MAGISTRATES AND COURT OFFICERS.

##### *Judges of the Supreme Court.*

Judges of the Supreme Court of New South Wales are styled "Justices," and are appointed by Commission of the Governor on the advice of the Executive Council. No person may be appointed Judge of the Supreme Court unless he is a barrister of five years standing. The judges have power to make rules governing court procedure and to control the admission to practice of barristers and solicitors and to supervise their conduct.

A judge cannot be sued for any act done in the performance of his judicial duties within the scope of his jurisdiction. He holds office "during good behaviour" until the age of seventy years at a salary fixed by statute. By these provisions the judiciary is rendered independent of the executive, but a judge may be removed from office by the Crown on the address of both Houses of Parliament. Each member of the Industrial Commission of New South Wales and the judge of the Land and Valuation Court have the same status and rights as a puisne judge of the Supreme Court. A judge, including the Chief Justice, is granted a pension on retirement, the amount of which is dependent on his salary and length of service.

##### *Judges of the District Court.*

Any barrister of five years standing or attorney of seven years standing may be appointed as judge of the District Court by the Governor to exercise the jurisdiction of the Court in districts allotted by the Governor. Such persons hold office during ability and good behaviour up to the age of 70 years. They may be removed from office by the Governor for inability or misbehaviour subject first to appeal to the Governor-in-Council. A judge may not engage in the practice of the legal profession. A judge of any District Court is also a chairman of every Court of Quarter Sessions in the State. A judge is granted a pension on retirement, the amount of which is dependent on length of service. The chairman of the Workers' Compensation Commission has the same status as a District Court judge.

##### *Officers of the Courts.*

Certain ministerial functions are performed by magistrates and justices in addition to their judicial duties, but special officers are appointed for certain purposes in the administration of justice, viz., Crown Prosecutors to act in Criminal Courts in prosecuting persons accused of indictable offences, Clerks of Petty Sessions, the Clerk of the Peace and his deputies to act as Clerks for the Courts of the Quarter Sessions, Registrars of the Small Debts and District Courts, and bailiffs.

In connection with the Supreme Court there are two important officers in addition to those connected with special jurisdictions, viz., the Prothonotary and the Sheriff.

The Prothonotary of the Supreme Court is its principal officer in the common law and criminal jurisdiction. He acts as registrar of the Courts

of Matrimonial Causes, Admiralty, and Criminal Appeal. The Prothonotary or his deputy may be empowered under rules of the court to transact business usually transacted by a judge sitting in chambers, except in respect of matters relating to the liberty of the subject.

The office of Sheriff is regulated by the Sheriff Act, 1900. There is a Sheriff and Under Sheriff. Sheriff's officers are stationed at convenient country centres, where there is a Deputy Sheriff—usually a Police Magistrate. The functions of the Sheriff include the enforcement of judgments and execution of writs of the Supreme Court, the summoning and supervision of juries, and administrative arrangements relating to the holding of courts.

#### *Magistrates.*

Magistrates are appointed from among members of the Public Service unless it is certified by the Public Service Board that no member of the service is suitable and available for such office. Persons so appointed must have attained the full age of thirty-five years, and have passed the prescribed examination in law. They hold office at the pleasure of the Governor.

Within the districts of the Metropolis, Parramatta, Newcastle, Broken Hill, Bathurst, Windsor, Richmond, and Wollongong, the jurisdiction of the Court of Petty Sessions is exercised exclusively by Stipendiary Magistrates. In country districts jurisdiction in Petty Sessions is exercised by Police Magistrates wherever convenient, and otherwise by honorary justices in minor cases. Police Magistrates were first appointed in 1837, and Stipendiary Magistrates in 1881.

The jurisdiction of magistrates is explained in connection with Courts of Petty Sessions, and their functions comprise those of Justices of the Peace, explained later. In addition they usually act in country centres as District Registrars in Bankruptcy, Revising Magistrates, visiting Justices to gaols, Deputy Sheriffs, Mining Wardens, Coroners and Industrial Magistrates and exercise delegated jurisdiction under the Liquor Act.

#### *Justices of the Peace.*

Persons of mature age and good character may be appointed as Justices of the Peace by Commission, under the Grand Seal. The office is honorary, and is held during the pleasure of the Crown. No special qualifications in law are required, but appointees must be persons of standing in the community and must take prescribed oaths. Women became eligible for the office under the Women's Legal Status Act, 1918.

The functions of justices are numerous, extending over the administration of justice generally, the maintenance of peace, and the judicial duties of the office. The judicial powers are explained in connection with the Courts of Petty Sessions, and other duties include the issue of warrants for arrests, issue of summonses, administration of oaths, and certification of documents.

On 31st December, 1936, there were approximately 32,900 Justices of the Peace in New South Wales, including 1,650 women.

#### POOR PERSONS' LEGAL EXPENSES.

Under the Poor Prisoners' Defence Act, 1907, a person committed for trial for an indictable offence may apply for legal aid for his defence before the jury is sworn. If the judge or committing magistrate considers that the person is without adequate means, and that such legal aid should be supplied, the Attorney-General may arrange for the defence of the accused and for payment of expenses of all material witnesses.

The Poor Persons' Legal Remedies Act, 1918, authorises judges to make rules regulating the practice and procedure, and the costs and fees payable in respect of proceedings to which poor persons are parties. Such proceedings may not be instituted without permission, and judges to whom applications for permission are made are authorised to act as conciliators. The rules made under this Act do not apply to criminal proceedings.

Barristers and solicitors have enrolled under this Act to give their services free of charge on being assigned in a proper case. Out-of-pocket expenses are paid by the Crown.

#### LEGAL PROFESSION.

The legal profession in New South Wales is controlled by rules of the Supreme Court, which prescribe the conditions of entry to the profession, regulate studentships at law and specify the legal examinations which must be passed prior to admission to practice. Separate boards have been established to govern the admission of barristers and of solicitors. By the Legal Practitioners Act, 1898-1935, provision has been made for the admission of conveyancers as solicitors and the discontinuance of the grant of conveyancer's certificates; for the examination of accounts of solicitors and conveyancers; and for the establishment and administration of a solicitors' fidelity guarantee fund. The fund is maintained from annual contributions from or levies imposed on solicitors. From it may be paid the amount of pecuniary loss suffered by persons as the result of theft or fraudulent misapplication by a solicitor of any monies or other valuable property entrusted to him.

Any solicitor duly admitted to practice has the right of audience in all courts of New South Wales. By the Legal Practitioners' Act, 1898-1935, provision is made for the hearing of charges of professional misconduct upon the part of solicitors by the Statutory Committee of the Incorporated Law Institute of New South Wales, which has the power to make an order striking off the roll, suspending from practice or imposing a fine on any solicitor. There is also provision for an appeal to the Court from an order of the Statutory Committee. Barristers have, in general, no legal right to fees for their services in court, but scales of charges for certain services rendered by solicitors are prescribed by regulation and in certain instances costs of suits are taxed by an officer of the Supreme Court. Women are eligible to be admitted as barristers or solicitors.

The following table shows the number of members of the legal profession in practice at intervals since 1911, and illustrates the increase in numbers in recent years:—

End of Year.	Barristers.	Solicitors.		
		Sydney	Country.	Total.
1911	156	603	411	1,014
1921	185	681	431	1,112
1931	236	1,013	568	1,581
1932	257	1,050	586	1,606
1933	259	1,048	*600	1,648
1934	270	1,075	*624	1,699
1935	272	1,052	*598	1,650
1936 .	281	1,060	*603	1,672

\* In addition, there were 5 solicitors practising in the Federal Capital Territory.

The number of barristers at the end of 1936 included 31 King's Counsel. The number stated in the table does not include the District Court judges, the Master in Equity, magistrates, State officials who are barristers, non-practising barristers, nor those on the roll—but not resident—in New South Wales. There were also 43 certified conveyancers.

Barristers are organised under the Council of the Bar of New South Wales, and solicitors under the Incorporated Law Institute of New South Wales. There is also a Society of Notaries.

#### PUBLIC TRUSTEE.

The Public Trustee exercises administrative functions in regard to estates in terms of the Public Trustee Act, 1913, as amended in 1923. The Public Trustee may act as trustee under a will, or marriage or other settlement; executor of a will; administrator under a will where the executor declines to act, is dead or absent from the State; administrator of intestate estates; and as agent or attorney for any person who authorises him so to act. In general the Public Trustee takes out probate or letters of administration in the Probate Court in the ordinary way, but he may file an election to administer in that court in certain cases in testacy or intestacy where the gross value of the estate does not exceed £400. He may act also as manager, guardian or receiver of the estate of an insane or incapable person, or as guardian or receiver of the estate of an infant. He is a *corporation sole* with perpetual succession and a seal of office and is subject to the control and orders of the Supreme Court.

Where the net value of an intestate estate does not exceed £100, the Public Trustee may pay the whole amount direct to the widow, and he may apply the share of an infant, not exceeding £500, to the maintenance of the infant. As attorney or agent he may collect rents or interest on investments, supervise repairs, prepare taxation returns, and pay taxes, etc. Agents of the Trustee are appointed in towns throughout the State.

Operations are not conducted for profit, and the fees and commission chargeable are regulated to provide sufficient money to cover working expenses only. The accounts of the Public Trust Office are audited by the Auditor-General.

The following is a summary of the transactions during the last five years:—

Particulars.	Year ended 30th June.				
	1932.	1933.	1934.	1935.	1936.
Estates received for Administration ... ..	1,944	1,842	1,902	2,014	2,208
£	£	£	£	£	£
Amount Received* ... ..	890,816	1,021,151	1,138,954	1,132,687	1,281,821
Amount Paid* ... ..	844,309	1,012,747	1,128,903	1,056,953	1,287,701
Commission and Fees† ... ..	48,653	43,635	43,906	48,548	49,710
Unclaimed Money—					
Paid into Treasury ... ..	22,261	15,935	18,626	11,416	19,399
Subsequently Claimed... ..	346	716	2,779	1,117	1,267
Credit Balances of Estates ...	6,743,050	6,867,924	7,222,825	7,044,965	6,612,093

\* Trust Moneys.

† Office Revenue.

The cost of administration amounted to £38,967 in 1932-33, to £38,605 in 1933-34, to £41,290 in 1934-35, and to £44,961 in 1935-36. The amounts shown in the foregoing table are inclusive of transactions in connection

with the funds of the Destitute Children's Asylum, the Matraville Soldiers' Settlement, and the sale of land under the Local Government Act, which it is the function of the Public Trustee to administer. In addition, the Public Trustee has also the responsibility of controlling properties in the Dacey Garden Suburb, and of administering the National Relief Fund of New South Wales.

Under the Companies (Liquidation) Act, 1935, the Public Trustee was appointed as liquidator of certain companies, the affairs of which were under investigation by a Royal Commission.

#### REGISTRATION OF LEGAL DOCUMENTS, ETC.

The Registrar-General in New South Wales registers certain occurrences and transactions of special legal significance as prescribed by Act of Parliament. Registrations are made of births, deaths, and marriages; of deeds, titles to land, transfers, land leases; of mortgages and liens; of companies and firms, and of documents under the Real Property Act; of bills of sale; and of instruments under the Newspapers and Printing and certain other Acts. A business carried on other than in the owner's name is required to be registered under the Business Names Act, 1934, by which the Registration of Firms Act, 1902, was repealed.

The documents relating to registration are usually available for inspection by the public. Fees are charged in most cases for registration and for inspection. The amount collected as fees for registration, inspection, and searches, and for public documents sold by the Registrar-General during 1935 was £166,417, and in 1936 it was £179,213, of which £118,109 was collected by the Land Titles Branch, and £52,679 by the Deeds Branch.

#### COURTS OF FEDERAL JURISDICTION.

By the Commonwealth Judiciary Act, 1903-1934, jurisdiction under federal laws is vested in the courts of the States within the limits of their several jurisdictions, as to locality, subject-matter, etc. Justices of the Peace are, however, excluded from exercising federal jurisdiction. Certain Acts (*e.g.*, the Postal Act and Customs Act) also confer jurisdiction in special cases on State Courts. Bankruptcy jurisdiction under federal legislation is vested in the Supreme Court of New South Wales. A Federal Court of Bankruptcy was constituted in 1924.

There are two Commonwealth courts which possess certain jurisdiction, exclusive of State courts, viz., the High Court of Australia and the Commonwealth Court of Conciliation and Arbitration. An account of the latter court is given in the chapter of this volume entitled "Industrial Arbitration."

The High Court of Australia was established in 1903, and consists of a Chief Justice and five puisne justices. Its principal seat is at the seat of Government, but sittings are held in the various States, and district registrars are appointed as required. The jurisdiction of the Court, which may be exercised in the first instance by one judge, is exclusive with regard to suits between States or any State and the Commonwealth, matters arising directly under a treaty, or writs of mandamus or prohibition against a federal officer or court. The High Court is constituted also as a Court of Appeal for Australia. The Federal Court of Bankruptcy consists of one or two Judges appointed by the Governor-General by Commission.

## BANKRUPTCY.

Bankruptcy law and procedure in New South Wales were virtually codified by a consolidating Act passed in 1898. The State law has been superseded by the Bankruptcy Act of the Commonwealth which came into force on 1st August, 1928, and the State Act applies only to proceedings pending at 1st August, 1928.

Under the federal law any person unable to meet his debts may surrender his estate for the benefit of his creditors, or the latter may apply for compulsory sequestration under certain conditions provided the aggregate amount of indebtedness exceeds £50. Upon the issue of an order of sequestration the property of the bankrupt vests in the official receiver named in the order, and no creditor has any remedy against the property or person of the bankrupt except by appeal to the Court. Under certain conditions a bankrupt may compound with his creditors or enter into a scheme of arrangement, if approved by the Court.

An Inspector-General in Bankruptcy has been appointed under the Commonwealth Act, and bankruptcy jurisdiction in New South Wales, which forms one of the federal bankruptcy districts, is vested in the Supreme Court of the State. One judge in particular exercises the jurisdiction, but for purposes of convenience all the Supreme Court Justices are invested with bankruptcy jurisdiction. A Federal Court of Bankruptcy has been constituted also, in terms of an amending Act passed in July, 1930, and the State Supreme Court judge acts in emergency only.

The Court has power to decide questions of priorities and other questions of law affecting a bankrupt estate. Questions of fact may be tried before a jury.

The Registrar in Bankruptcy has such duties as the Attorney-General of the Commonwealth directs, or as are prescribed, and he exercises powers of an administrative nature delegated by the Court. He may hear debtors' petitions, make full examination of bankrupts or of persons suspected to be indebted to a bankrupt, make sequestration orders, and grant orders of discharge where the applications are not opposed. There are deputy registrars in the country districts.

Official receivers manage estates for the benefit of creditors, act under the general authority of the Attorney-General and are controlled by the Court. The receiverships of particular estates were formerly distributed amongst them by the Court, but during 1934 a permanent officer of the Commonwealth was appointed as official receiver; and all sequestrated estates are now vested in him. Persons registered by the Court as qualified to act as trustees, as well as the official receiver, may be appointed by resolution of the creditors to manage sequestrated estates.

Particulars of the operations in New South Wales under the Bankruptcy Act of the Commonwealth are shown in the chapter of this Year Book relating to Private Finance.

## REGISTRATION OF PATENTS, COPYRIGHTS, TRADE MARKS AND DESIGNS.

The registration of patents, copyrights, trade marks, and designs, devolves upon the federal authorities. A patent granted under the Commonwealth law is afforded protection in all the States, in Norfolk Island the territories of Papua and New Guinea for sixteen years. The copyright in a book, the performing right in a dramatic or musical work, and the lecturing right in a lecture, continue for the author's life and fifty years after his death. The British Copyright Act, subject to certain modifications, is in force in the Commonwealth under the Copyright Act, 1912-1935.

The registration of a trade-mark protects it for fourteen years, but may be renewed from time to time. An industrial design may be protected for five years, and the period extended to fifteen years.

At any time after registration any person interested may apply to the High Court for cancellation of the registration on the ground that the design has been published in the Commonwealth prior to registration, or for the grant of a compulsory licence on the ground that the design is applied by manufacture to any article outside the Commonwealth and is not so applied in the Commonwealth to an extent reasonable in the circumstances.

Under the various Imperial and Federal Acts, arrangements may be made by means of reciprocal legislation for the protection in other countries of patents, copyrights, trade-marks, and designs. In all cases the rights of holders under the legislation of a State were conserved.

#### EXTRA TERRITORIAL SERVICE AND EXECUTION—FUGITIVE OFFENDERS.

By the Service and Execution of Process Act (Federal), civil process commenced in any State of the Commonwealth may be served in any other, and judgment obtained in any State may be enforced in any other. In criminal proceedings, warrants issued in one State and endorsed in another may be duly executed in that State and the fugitive surrendered.

Special arrangements governing these matters as between different parts of the British Empire are made by the Fugitive Offenders' Act, 1881 (Imperial).

Extradition to foreign countries is governed by Imperial Acts, or local Acts in pursuance of treaties concluded with the countries concerned by the Imperial Government though since 1930 the right of the Australian Government to enter into such treaties on its own account subject to certain conditions has been conceded.

## POLICE.

THE police force of New South Wales is organised under the Police Regulation Act of 1899 and amendments. The Commissioner of Police, under direction of the Chief Secretary, is charged with the superintendence of police, and is responsible for the organisation, discipline, and efficiency of the force. By an amending Act assented to in March, 1935, it has been provided that the Commissioner of Police may be removed from office only for incompetence or misbehaviour by resolution of both Houses of Parliament. Superintendents and inspectors of police are appointed by the Governor as subordinates of the Commissioner. Sergeants and constables are appointed as required by the Commissioner, but such appointments may be disallowed by the Governor.

No person may be appointed constable unless he is of sound constitution, able-bodied, under the age of 30 years, of good character, and able to read and write. In considering applications for appointment to the police force, however, it is not the practice to accept applications from persons over 27 years of age and preference is given to young men between 20 and 24 years of age. Any person who has been convicted of a felony, is in other employment, or keeps a house for the sale of liquor, is incapable of acting as an officer of police. A high physical standard is required of recruits.

During 1933 the appointment of police cadets (youths between 16 and 18 years of age) was authorised. Thirty lads of good education were selected during the year, preference being given, other qualifications taken into account, to sons of police still serving or of retired members of the force. The cadets receive a comprehensive training, and this new method of recruitment has proved of considerable advantage to the department. At 31st December, 1936, there were 100 cadets in training.

A forensic ballistic section has been established in the Criminal Investigation Branch for the study of firearms, and a wireless broadcasting station under the complete control of the Police Department came into operation in May, 1934.

Pension and gratuity rights accrue to officers who retire by reason of medical unfitness for duty, or on or after attaining the age of 60 years. Where an officer is disabled or killed in the execution of his duty, a special allowance not exceeding his salary at the time of disablement may be paid to him or his dependants. Particulars of the pension fund are shown in the chapter entitled "Social Condition."

The primary duties of the police are to prevent crime, to detect offenders and to bring them to justice, to protect life and property, to enforce the law, and to maintain peace and good order throughout the State. In addition, they perform many duties in the service of the State, *e.g.*, they act as clerks of petty sessions in small centres, as Crown land bailiffs, foresters, mining wardens, inspectors under Fisheries and other Acts, and they collect a large volume of statistical returns. In the metropolitan area and Newcastle the police regulate the street traffic.

The State is divided into 9 superintendents' districts, containing 548 police stations. The police force, numbering 3,626, of whom 8 were police women was distributed at 31st December, 1936, as follows:—

Classification.	Commissioner and Superintendents.	Inspectors.	Sergeants.	Constables.	Total.
General ... ..	15*	65†	618	2,283	2,981
Criminal Investigation Branch.	1	4	25	94	124
Others on detective work ...	...	...	39	157	196
Traffic ... ..	...	3	22	259	284
Water ... ..	...	...	5	24	29
Special Constables ... ..	...	...	...	4	4
Women ... ..	...	...	1	7	8
Total ... ..	*16	72†	710	2,828	‡3,626

\* Includes one deputy commissioner and one acting superintendent. † Includes seven acting inspectors. ‡ Does not include 100 police cadets, four matrons, 2 relieving matrons, 13 trackers and 1 bandmaster.

The following statement shows for various years since 1901 the strength of the police establishment (exclusive of trackers, women police and matrons) in relation to the population. With a greater volume of administrative legislation their duties have been increased considerably during the period:—

Year.	Number of Police.	Inhabitants to each Policeman.	Year.	Number of Police.	Inhabitants to each Policeman.
1901	2,172	634	1933	3,592*	728
1911	2,487	684	1934	3,592*	730
1921	2,734	779	1935	3,581*	741
1931	3,646	704	1936	3,718*	721

\* Including police cadets.

During each period intervening between the years shown above there was a decline in the strength of the police force in relation to the population until 1926. In the four years 1927 to 1930 the net additions to the force were greater proportionately than the increase in population, then the number of police was reduced and the ratio to the population continued to decline until in 1936, when a slight increase was shown.

A comparative statement of the annual expenditure of the Police Department is shown below:—

Year ended 30th June—	Expenditure.				State Contribution to Superannuation Fund.
	Salaries.	Contingencies.	Total.	Per Head of Population.	
	£	£	£	s. d.	£
1911 ... ..	392,602	99,951	492,553	5 11	24,000
1921 ... ..	833,818	228,283	1,062,101	10 2	80,000
1931 ... ..	1,291,737	302,089	1,593,826	12 6	190,800
1932 ... ..	954,041	261,285	1,215,326	9 6	191,500
1933 ... ..	919,384	260,237	1,179,621	9 1	208,400
1934 ... ..	929,817	253,983	1,183,800	9 1	209,000
1935 ... ..	939,953	253,512	1,193,465	9 1	208,500
1936 ... ..	999,990	260,583	1,266,573	9 6	230,700

Including State contribution to the Police Superannuation Fund the cost of the Police Department reached the maximum in 1929-30, viz., £1,816,215, or 14s. 5d. per head of population. The corresponding figures in 1935-36 were £1,497,273, or 11s. 3d. per head, the decline being due mainly to reductions in salaries. The total expenditure in 1934-35 was £1,401,965.

## PRISONS.

A PRISON may be established by proclamation of the Governor, at any premises prepared and maintained as a prison at the public expense. A Comptroller-General is appointed by the Governor for the care of prisons and custody of convicted prisoners. Persons in custody not being prisoners under sentence for an indictable offence or adjudication of imprisonment for some offence punishable on summary conviction are held by the Comptroller-General for the Sheriff, as also are prisoners under sentence of death.

All prisons must be visited at least once a week by a magistrate appointed to be "Visiting Justice," who may enter and inspect, and report to the Chief Secretary upon any matter connected with the gaol as often as he deems necessary. Such justice may hear and determine complaints against prisoners and award as punishment a term of solitary confinement. Any judge of the Supreme Court may visit and examine any prison at any time how and when he thinks fit.

At 30th June, 1936, there were 23 gaols in New South Wales. Six were classed as principal gaols, 6 as minor, 6 as special establishments, and 5 as police gaols. The principal gaols were the State Penitentiary for men and the State Reformatory for women—both at Long Bay, Sydney—the Goulburn Reformatory and the gaols at Parramatta, Bathurst, and Maitland. Each of these gaols is used for a particular class of prisoners.

The State Penitentiary, Long Bay, is used for the detention of persons awaiting trial at metropolitan courts. The majority of prisoners convicted in the metropolitan area are lodged in the State Penitentiary in the first instance, the short sentence men being retained and those serving longer periods of imprisonment being drafted to country establishments. Facilities are provided at Long Bay for the observation and treatment of prisoners suffering from mental or physical defects. The State Reformatory is used for female prisoners of all classes. At Goulburn Reformatory special treatment is provided for first offenders, and at Bathurst and Parramatta prisoners convicted more than once are imprisoned.

The smaller gaols are used for prisoners undergoing short sentences, and for the detention of those who require special treatment apart from other long-sentence prisoners. The special establishments are the Afforestation Camps at Tuncurry, Bombala, Glen Innes, Oberon, and Tumbarumba and the Emu Plains Prison Farm. At the Prison Farm, prisoners—usually first offenders under 25 years of age—are trained in farm work; at Tuncurry older men are employed on a pine plantation, and similar work is provided at other afforestation camps for prisoners of the several classes. At these establishments the conditions of gaol life are modified with the object of fitting the men to lead useful lives after release, and for this reason the prisoners sent to the camps are selected with discrimination.

The police gaols are used for the detention of persons sentenced in the various districts for periods not exceeding fourteen days, and whose removal to the established gaols would involve undue expense in consequence of the shortness of the term of imprisonment.

In the larger gaols the prisoners are classified according to character and previous record, and the principle of restricted association is in operation.

## PRISONERS.

The number of gaol entries during various years since 1901 and the number of prisoners in gaol at the close of each year are shown below. The figures are exclusive of persons detained under the Inebriates Act:—

Year.	Number of Gaol Entries during Year.	Prisoners under Sentence.							
		Received during Year.				In Prison at end of Year.			
		Males.	Females.	Total.	Per 1,000 of Population.	Males.	Females.	Total.	Per 10,000 of Population.
1901	14,361	8,899	2,941	11,840	8.6	1,605	207	1,812	12.3
1911	9,532	6,086	1,347	7,433	4.5	1,134	115	1,249	6.9
1921	8,817	5,541	1,073	6,614	3.1	1,272	97	1,369	6.0
1929-30	11,271	7,378	1,286	*8,664	3.4	1,749	94	1,843	7.3
1930-31	12,731	8,863	1,264	*10,127	4.0	1,628	63	1,691	6.6
1931-32	13,504	9,644	1,241	*10,885	4.2	1,596	52	1,648	6.4
1932-33	14,556	10,693	1,303	*11,996	4.6	1,683	92	1,775	6.8
1933-34	13,527	9,868	1,094	*10,962	4.2	1,448	67	1,515	5.8
1934-35	11,772	8,628	828	*9,456	3.6	1,351	47	1,398	5.3
1935-36	11,786	8,639	1,012	*9,651	3.6	1,284	46	1,330	5.0

\* Prisoners under sentence only.

The number of gaol entries shown in the table includes convicted persons, persons awaiting trial, debtors, naval and military offenders, and persons on remand, some of whom were received and counted several times.

The number of persons received into prison under sentence in 1935-36 counted once each time received, was 9,651, viz., males 8,639 and females 1,012, showing increases of 11 males and 184 females in comparison with the preceding year. The total number was above the average of years prior to 1930-31, owing to an increase in the number detained for short periods in default of payment of fines. Nevertheless the ratio to the population, 3.6 per 1,000, was lower than in 1911 and less than half the ratio in 1901.

The number of distinct persons received into gaol under sentence in 1935-36 was 8,000, of whom 634 were women. The number was greater by 1,243 than in the preceding year, when distinct persons received numbered 6,350 males and 407 females.

Particulars of the sentences imposed on prisoners received into gaol during each of the last two years are as follows:—

	1934-35.	1935-36.
Not exceeding one week .. .. .	4,576	5,104
Over one week and not exceeding one month ..	2,254	2,080
Over one month and not exceeding six months ..	1,420	1,315
Over six months and not exceeding one year ..	339	314
Over one year and not exceeding two years ..	261	248
Over two years and not exceeding five years ..	88	95
Over five years and not exceeding ten years ..	7	9
Over ten years .. .. .	....	7
Governor's pleasure .. .. .	....	2
Life .. .. .	....	14
Death .. .. .	2	3
Term not specified .. .. .	509	460
Total .. .. .	9,456	9,651

During 1935-36 73 per cent. of the male and 89 per cent. of the female prisoners were received for terms of one month or less; 6,213 were committed to prison in default of payment of fines imposed; and of the total committed to gaol 94 per cent. were received from the police courts and 563 or 6 per cent. from the higher courts.

The daily average number of prisoners under sentence during the year ended 30th June, 1936, was 1,373, of whom 49 were females.

The prisoners remaining in gaol under sentence on 30th June, 1936, numbered 1,330, included 65 serving life sentences, and 53 who had been declared habitual criminals and sentenced for an indefinite period. There are 8 habitual criminals in the criminal division of the Mental Hospitals not included in prison figures.

Capital punishment may be inflicted in New South Wales, but executions are unusual. Since the beginning of the year 1918 there have been five executions—two in 1924, one in 1932-33, and two in 1935-36.

The system of indeterminate sentences was introduced in terms of the Habitual Criminals Act, 1905, which empowers a judge to declare as an habitual criminal any person convicted for the third or, in some cases, the fourth time of certain criminal offences, as specified in the Act. The declarations were made only in the case of convictions on indictment until the Act was amended in 1924 to extend the system to persistent offenders, who are convicted summarily. In such cases a stipendiary or police magistrate may direct that an application be forwarded to a Judge of the Supreme Court or a Court of Quarter Sessions to have the prisoner declared an habitual criminal.

The habitual criminal serves the definite sentence imposed for the offence of which he has been convicted, and is then detained for an indefinite term, until he is deemed fit for freedom. The indeterminate stage is divided into three grades—intermediate, higher, and special. A minimum period of 4 years 8 months must be spent in the lower grades before the prisoner can gain admission to the special grade, wherein cases may be brought under consideration with a view to release on license. After release he is required to report to the authorities at stated intervals during a period specified in the license.

The cases of all habitual criminals are considered at quarterly intervals by a Consultative Committee appointed for that purpose and the case of each such prisoner is brought annually under the notice of the Minister of Justice.

The Habitual Criminals Act prescribes that while under detention as an habitual criminal every prisoner must work at some useful trade, and receive a share of the proceeds of his work. As the majority of these persons have not been trained in any branch of skilled labour, facilities are afforded them, while serving the definite term, to acquire training in some remunerative employment.

Twelve men were declared habitual criminals during the year ended 30th June, 1936, and 29 in the previous year. At 30th June, 1936, there were under detention 43 men who had not yet completed the definite period of their sentence, and 53 men who had passed into the indeterminate stage.

Among the special classes of prisoners are those known as "maintenance confinees," who have been imprisoned for disobeying orders of the courts for the maintenance of their wives and children. Such prisoners are required to work, and the value of the work, after deducting the cost of the prisoner's keep, is applied towards the satisfaction of the orders for maintenance, etc.

During 1935-36 the number of maintenance confinees received into gaol was 354, as compared with 390 during the year 1934-35. Gaol earnings to the amount of £1,345 were paid to dependants of confinees during the year 1935-36, and £1,474 during 1934-35. Ninety-three confinees paid the amount of their orders from gaol earnings in 1935-36 and 67 in 1934-35, and 50 and 67 respectively partly from gaol earnings in these years. The number in gaol at the end of the year 1935-36 was 53, compared with 63 on 30th June, 1935.

#### *Conduct of Prisoners.*

The conduct of prisoners during 1935-36 was satisfactory; 147 were punished, representing 1 per cent. of the total. Of the 229 offences committed 3 were assaults on officers and 16 assaults on prisoners.

#### *Sickness and Mortality in Gaols.*

The medical statistics of prisons show that, with an average daily number of 1,473 inmates during 1935-36, the total number of cases of sickness treated in hospital was 574. Five prisoners died, and 21 were released on medical grounds. The death-rate per 1,000 of the average number of inmates was 3.4. Corresponding figures for 1934-35 were: Inmates, 1,541; cases of sickness, 665; deaths, 4; releases on medical grounds, 10; and the death rate, 2.6 per 1,000 inmates. There was one execution in 1932-33, two in 1935-36, but none during the years ended 30th June, 1934 and 1935.

Particulars relating to cases of venereal diseases amongst prisoners and those detained in lock hospitals are shown in the chapter entitled "Social Condition."

#### *Industrial Activity in Prison Establishments.*

It is an accepted principle that useful employment is one of the most potent factors in promoting discipline and good conduct in the gaols and in reforming those who have lapsed into crime. Therefore employment at industries calculated to inspire interest, to encourage some degree of skill, and subsequently to prove remunerative, is provided under the supervision of competent instructors. The principal activities are farming, gardening, bread-baking, the manufacture of clothing, furniture, matting, etc., and the scope for employment in skilled trades is being extended steadily. Under a system introduced in April, 1922, prisoners may receive payment for work produced in excess of a fixed task.

In 1935-36 the value of prisoners' labour of a productive nature, excluding domestic employment, amounted to £57,712, compared with £57,790 in the previous year.

#### BIRTHPLACES, RELIGIONS, AND EDUCATION OF PRISONERS.

According to information supplied by prisoners received into gaol during the year, 63 per cent. were natives of New South Wales, 20 per cent. were from other States of the Commonwealth, 10 per cent. came from the British Isles and the remainder were chiefly Europeans.

The distribution of prisoners serving sentences at 30th June, 1936, according to birth place and religion, was as follows:—

Birthplace.	Males.	Females.	Total.	Religion.	Males.	Females.	Total.
New South Wales ...	805	29	834	Church of England	494	13	507
Other Australian States	250	10	260	Roman Catholic .	433	31	464
New Zealand ...	37	3	40	Methodist...	49	1	50
England and Wales ...	90	1	91	Presbyterian ..	71	1	72
Scotland ...	23	...	23	Other Christian ..	46	...	46
Ireland ...	21	3	24	Non-Christian ..	15	...	15
Other British ...	13	...	13	No religion ...	175	...	175
Foreign Countries ...	43	...	43	Debtors ...	1	...	1
At Sea ...	1	...	1	Total ...	1,284	46	1,330
Debtors ..	1	...	1				
Total ..	1,284	46	1,330				

Nine prisoners were illiterate, and 6 could read and write in a foreign language only.

#### REMISSION OF SENTENCES.

##### *First Offenders.*

Special provision is made by the Crimes Act, 1900, and its amendments, for lenience towards any person convicted of a minor offence and sentenced to imprisonment, provided such person has not been convicted previously of an indictable offence. The term "minor offence" includes offences punishable summarily, and any other offence to which the court applies these provisions of the Act. In such cases the execution of the sentence is suspended upon the defendant entering into recognizance to be of good behaviour for a fixed period, which may not be less than twelve months. Such persons are required to undergo an examination to facilitate future identification and to report periodically to the police. During the period of probation they may be arrested and committed to prison for the term of sentence imposed for any breach of the conditions of their release.

The hearing of charges against female first offenders must be in private unless the defendant elects to be heard in open court, and reports of such cases may not be published. In terms of an amending Act passed in 1929 this law does not apply to cases of larceny in retail shops.

The following table shows particulars concerning persons released as first offenders in the various years since 1901; cases of children released on probation by the Children's Courts are not included.

Year.	First Offenders Released on Probation.			Year. ended 30th June.	First Offenders Released on Probation		
	By Higher Courts.	By Magistrates Courts.	Total.		By Higher Courts.	By Magistrates Courts.	Total.
1901	156	23	179	1931	1	703	704
1911	220	61	281	1932	9	464	473
1921	246	395	641	1933	4	434	438
1927*	30	364	394	1934	4	338	342
1929*	21	436	457	1935	...	407	407
1930*	2	573	575	1936	1	342	343

\* Year ended 30th June.

*Prisoners released on Probation.*

By good conduct and industry certain classes of prisoners may gain the remission of part of their sentences. They are released on license on terms similar to those applied to first offenders as described above.

The licenses operate for the unexpired portion of the sentence, and a breach of the conditions of release may be punished by the cancellation of the license, and recommitment to gaol for the balance of the sentence. Licenses under the Crimes Act were granted to 65 men and 4 women during the year ended 30th June, 1936, and to 73 men and 9 women during 1934-35.

## COST OF ADMINISTRATION OF JUSTICE.

The following table shows the amount expended by the State in the administration of justice, in the protection of property, and in the punishment of criminals, in New South Wales during 1920-21 and 1930-31, and in each of the last three years; also the amount of fines and fees, and net returns from prisoners' labour paid into the Consolidated Revenue:—

Expenditure and Revenue.	1920-21.	1930-31.	1933-34.	1934-35.	1935-36.
Expenditure—	£	£	£	£	£
Law Administration—					
Salaries, Pensions, etc., of Judges	59,106	63,903	53,961	57,531	67,713
Other ... ..	288,742	380,919	327,748	342,323	365,429
	347,848	444,822	381,709	399,854	433,142
Police—					
Administration, etc. ... ..	1,062,201	1,593,826	1,183,800	1,193,465	1,250,631
Payments to Pension Fund ... ..	80,000	190,800	209,000	208,500	230,700
	1,142,201	1,784,626	1,392,800	1,401,965	1,481,331
Prisons ... ..	126,122*	215,809	169,892	168,464	178,445
Total Expenditure ... ..	1,616,171	2,445,257	1,944,401	1,970,283	2,092,918
Revenue—					
Fees ... ..	100,188	210,418	189,608	183,509	192,361
Fines and Forfeitures ... ..	45,303	62,503	53,097	64,091	86,189
Receipts by Prisons Department	212	15,029	6,387	11,350	8,047
Total Revenue ... ..	145,703	287,950	249,092	258,950	286,597
Net Cost ... ..	1,470,468	2,157,307	1,695,309	1,711,333	1,806,321
Expenditure per Head of Mean Population—	s. d.	s. d.	s. d.	s. d.	s. d.
Law Administration ... ..	3 4	3 7	2 11	3 0	3 3
Police ... ..	10 11	14 3	10 8	10 8	11 2
Prisons ... ..	1 2	1 9	1 4	1 3	1 4
Total Expenditure ... ..	15 5	19 7	14 11	14 11	15 9
Revenue ... ..	1 5	2 4	1 11	1 11	2 2
Net Cost ... ..	14 0	17 3	13 0	13 0	13 7

\* Calendar year preceding.

The expenditure on law administration includes the salaries, etc., of judges, and the expenditure of the Departments of the Attorney-General and of Justice, except the expenditure on prisons, which is shown separately, and on sub-departments not directly concerned in the administration of the law, and certain other expenses.

The expenditure by the Police Department shown above is not absorbed solely by police services proper, since the members of the police force perform extensive administrative services for other Departments of State.

The receipts of the Prisons Department as stated in the table do not include the value of work done by the prisoners for the prisons and Government departments.

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## POPULATION.

### *The Census.*

The number and characteristics of the population of New South Wales have been ascertained at intervals by census enumerations for more than one hundred years past. Although regular musters were held during the first forty years of the existence of the colony, it was not until 1828 that the first actual census was held. This was followed by census enumerations at quinquennial intervals until 1861. Thereafter a census was taken at decennial intervals until 1921. For reasons of economy, that due in 1931 was postponed until 30th June, 1933.

The successive censuses up to 1901 were taken under the authority of the State Government, but upon establishment of the Commonwealth the census became a Federal function and the first Australian census to be taken under Federal control was in 1911.

### *Intercensal Estimates.*

In the periods between census enumerations the population is estimated at quarterly intervals. The factors causing variation in the population therefore require that a careful system of record be maintained whereby natural increase and net migration may be gauged accurately. The compulsory registration of births and deaths ensures reliable information as to the natural increase, and the records of arrivals and departures, although defective in some respects in the past, are becoming more reliable.

### THE GROWTH OF POPULATION IN NEW SOUTH WALES.

#### *From 1788 to 1856.*

The growth of the population of New South Wales between 1788 and 1856 is traced on page 223 of the Official Year Book for 1922, and the area and population at each territorial readjustment are shown on page 1 of this Year Book.

#### *From 1861 to 1936.*

With the exception of the territory ceded to the Commonwealth Government in 1911 and 1915, New South Wales (including Lord Howe Island) has occupied its present boundaries since 1859. The regular census enumerations furnish a connected summary of the growth of population

since that date as shown in the following table. The latest estimate made subsequent to the census is also shown.

Year.	Population.	Index Number of Population, (Census 1861 = 100).	Increase in Population since previous Census.			Number of Persons per Square Mile.
			Numerical.	Proportional.	Average Annual Rate.	
CENSUS RECORDS.†						
1861	350,860	100	168,436*	92·55*	6·76	1·12
1871	502,998	143	152,138	43·36	3·67	1·62
1881	749,825	214	246,827	49·07	4·07	2·42
1891	1,127,137	321	377,312	50·32	4·16	3·63
1901	1,355,355	386	228,218	20·25	1·86	4·37
1911	1,646,734	469	291,379	21·50	1·97	5·32
1921	2,100,371	599	453,637	27·55	2·46	6·79
1933	2,600,847	741	500,476	23·83	1·76	8·41
ESTIMATE.						
31 Dec., 1936.	2,681,736	764	80,889‡	3·11‡	0·88	8·67

\* Since 1851.

† Census held at end of March or beginning of April, 1933 Census, 30th June.

‡ Since Census of 1933.

Aboriginals are excluded from the population shown above, but the number of aboriginals enumerated at various dates is shown on page 366 of this Year Book. Aboriginals were included in figures of population appearing in the Year Book prior to the 1932-33 issue, but for uniformity with Commonwealth statistics, it has been deemed advisable to omit them from the general tables of population. The population of the Federal Capital Territory is excluded in 1911 and subsequent years.

A steady growth of population proceeded until 1891. This growth was especially marked between 1851 and 1861, when the gold discoveries were attracting eager fortune-hunters from other parts of the world, many of whom remained as settlers. After the gold rushes had ceased, the growth of population proceeded at a slower rate, but though neither the average annual rate of increase nor the proportionate increase of that period was attained again, the actual numerical expansion in later periods has been greater. Indeed, the lull which occurred in the growth of population during the sixties developed gradually into a period of increasingly rapid expansion after 1871, and the next twenty years were, from a relative point of view, a time of unexcelled development. This expansion, however, came to an end when the trade boom ended in the commercial crisis of the early nineties.

The next twenty years was a period of little progress in the development of population, the reasons being the commercial and industrial stagnation which followed the crisis of 1893, and the heavy decline in the birth-rate which lowered the rate of natural increase. State assisted immigration had been suspended in 1885, except for the families of those already assisted to immigrate, and was not resumed until 1905.

A new period of prosperity began early in the twentieth century, and the full weight of the trade revival was felt in the period 1911 to 1921, when the tide of population turned more definitely in favour of the growth of the State. Despite the serious effects of the Great War in diminishing the birth-rate, in temporarily stopping immigration, and in causing an exodus of men of reproductive ages, many of whom did not return, and despite the losses occasioned by the influenza epidemic of 1919, the period showed a greater relative expansion than either of its two immediate predecessors, and by far

the greatest average annual numerical increase on record. From 1921 to 1923 the volume of immigration was restricted, and the growth of population depended mainly upon natural increase. Immigration, however, was substantial in the five years 1924 to 1928, but in 1929 the decline which began in 1928 was continued, and with the advent of the severe depression there was an appreciable loss of population by emigration in 1930 and 1931. In subsequent years to 1936 there was a small annual gain, but in the aggregate it has failed to replace the loss by emigration in 1930 and 1931. The net increase in the population in the twelve and one-quarter years between the census of 1921 and that of 1933 was 500,476, or 23.83 per cent., equal to an annual rate of 1.76; the corresponding figures for the ten years which elapsed between the censuses of 1911 and 1921 were an increase of 453,637, or 27.55 per cent., equal to an annual rate of 2.46 per cent. In the three and one-half years following the census of 1933 the population has increased by only 80,889 or 3.11 per cent., representing an average annual rate of increase of 0.88 per cent.

The estimated population at the end of each year and the mean population for each year since 1926 are shown in the following table. The figures for the years up to 1932 have been adjusted in accordance with the final results of the census of 1933:—

Year.	Estimated Population at 31st December.			Mean Population.	
	Males.	Females.	Total.	Year Ended 31st December.	Year Ended 30th June.
1926 ...	1,212,046	1,164,632	2,376,678	2,346,903	2,320,184
1927 ...	1,241,763	1,191,892	2,433,655	2,403,881	2,375,204
1928 ...	1,266,254	1,216,875	2,483,129	2,460,410	2,432,731
1929 ...	1,283,241	1,236,452	2,519,693	2,503,026	2,484,071
1930 ...	1,294,419	1,251,934	2,546,353	2,532,289	2,518,553
1931 ...	1,302,893	1,263,421	2,566,314	2,555,871	2,544,691
1932 ...	1,315,003	1,276,728	2,591,731	2,579,741	2,567,639
1933 ...	1,324,839	1,288,680	2,613,519	2,601,782	2,590,840
1934 ...	1,335,123	1,301,080	2,636,203	2,623,560	2,613,063
1935 ...	1,344,339	1,313,327	2,657,666	2,645,575	2,634,353
1936 ...	1,355,493	1,326,243	2,681,736	2,667,839	2,656,512

#### SOURCES OF INCREASE SINCE 1861.

The following statement shows the extent to which natural increase and net immigration have contributed to the growth of the population during each intercensal period since 1861; in calculating the increase from 1901 the population of the Federal Capital Territory has been excluded, and aboriginals are omitted in all cases:—

Period.	Numerical Increase.			Average Annual Rate of Increase.		
	Natural.	Net Immigration.	Total.	Natural.	Net Immigration.	Total.
1861-1871 ...	106,071	46,067	152,138	per cent. 2.68	per cent. 1.24	per cent. 3.67
1871-1881 ...	139,722	107,105	246,827	2.48	1.95	4.07
1881-1891 ...	204,664	172,648	377,312	2.44	2.09	4.16
1891-1901 ...	230,669	(—) 2,451	228,218	1.90	(—) 0.02	1.86
1901-1911 ...	250,140	41,239	291,379	1.71	0.30	1.97
1911-1921 ...	318,945	134,692	453,637	1.79	0.77	2.46
1921-1933 ...	377,321	123,155	500,476	1.36	0.47	1.76
1861-1933 ...	1,627,532	622,455	2,249,987	2.42	1.42	2.81

Natural increase has been by far the greater factor in the growth of population in New South Wales in this period. In spite of the persistent though fluctuating fall in the rate of natural increase the average annual addition from this source, as shown in the last table, increased up to 1921, but in the following period declined. This decline is strikingly apparent in the table shown in the following section covering the period 1926 to 1936. Further details of the natural increase will be found on page 391. Immigration has intermittently provided considerable additions to the population, although over a period of seventy-two years, the net immigration amounts to only 622,455 or about one-quarter of the total increase. Immigration proceeded rapidly until 1886 when it declined heavily, and did not revive until 1905, when the State re-introduced the policy of affording assistance to immigrants. Between 1892 and 1904 the State actually lost more than ten thousand inhabitants by net emigration. The rate of increase due to net immigration has been very variable; considerable improvement was in evidence in the years 1907, 1911 to 1914, and 1924 to 1928, since then the net movement has been of little magnitude. Measured in relation to population the rate of increase from net immigration after the period 1881-91 is much below that of former years.

The elements in the growth of population of the State are shown in the graph on page 349 of this Year Book.

*Sources of Increase, 1921-1936.*

The sources of increase in population in New South Wales (exclusive of aboriginals of full blood) during each year since 1921 were as follows. The figures for the years up to 1932 are based upon the final results of the 1933 census:—

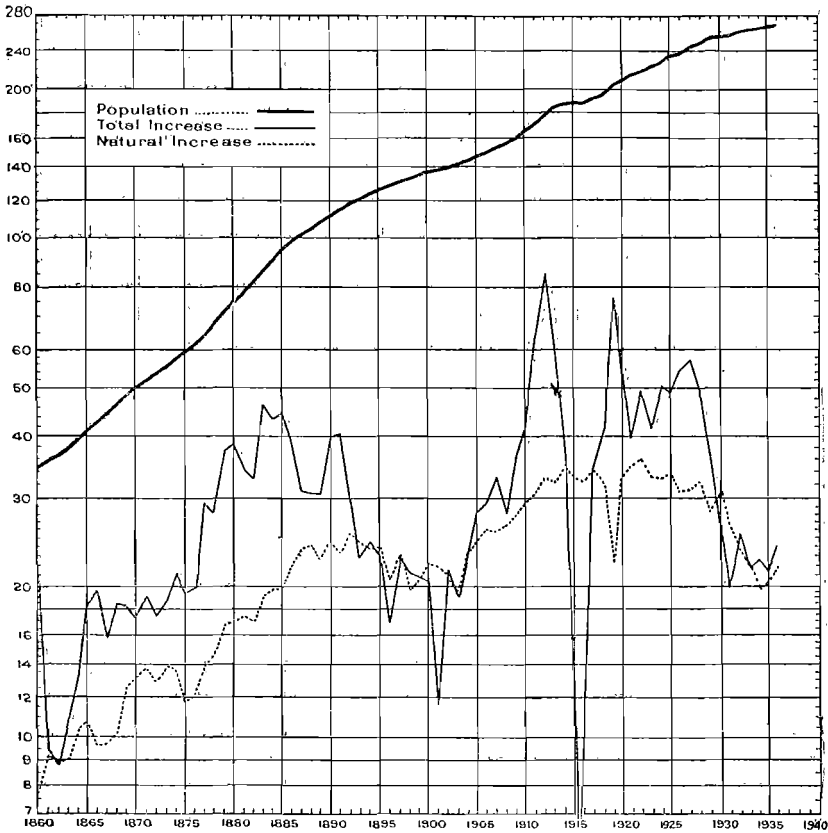
Year Ended 31st December—	Increase during Year.			Increase per cent. during Year.		
	Natural.	Net Immigration.	Total.	Natural.	Net Immigration.	Total.
1921 ... ..	34,610	5,358	39,968	1·65	·26	1·91
1922 ... ..	36,004	13,823	49,827	1·69	·65	2·34
1923 ... ..	33,021	8,341	41,362	1·52	·38	1·90
1924 ... ..	32,870	17,274	50,144	1·48	·78	2·26
1925 ... ..	33,793	15,524	49,317	1·49	·68	2·17
1926 ... ..	30,957	23,381	54,338	1·33	1·01	2·34
1927 ... ..	31,090	25,887	56,977	1·31	1·09	2·40
1928 ... ..	32,134	17,340	49,474	1·32	·71	2·03
1929 ... ..	28,089	8,475	36,564	1·13	·34	1·47
1930 ... ..	30,893	(—) 4,233	26,660	1·23	(—) ·17	1·06
1931 ... ..	26,451	(—) 6,490	19,961	1·04	(—) ·26	·78
1932 ... ..	23,552	1,865	25,417	·92	·07	·99
1933 ... ..	21,873	(—) 85	21,788	·84	(—) ·00	·84
1934 ... ..	19,861	2,823	22,684	·76	·11	·87
1935 ... ..	20,129	1,334	21,463	·76	·05	·81
1936 ... ..	21,817	2,253	24,070	·82	·08	·90

(—) Denotes an excess of Departures over Arrivals.

From 1921 net immigration grew rapidly though irregularly until 1927, but in 1928 a decline set in which culminated in a loss by emigration in 1930 and 1931. This decline was arrested in 1932, but subsequent gains have been small.

## POPULATION AND ANNUAL INCREASE, 1860 TO 1936.

Ratio Graph.



NOTE.—(i) The numbers at the side of the graph represent 10,000 of population, 1,000 Total Increase and 1,000 Natural Increase.

(ii) In 1916 there was a decrease of 8,711 in the population owing to the departure of troops and the curve fell below the limits of the graph.

The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the percentage of increase or decrease. Actual numbers are shown by means of the numbers at the side of the graph.

The natural increase in 1922 was numerically the greatest on record, though proportionately it was considerably below that of former years. After 1922 the number began to decline rapidly, mainly as a result of the sharp drop in the number of births, although in several years, notably 1926 and 1929, an increase in the number of deaths contributed to an extremely low natural increase. The natural increase in 1934 and the slightly higher figure in 1935 were the lowest recorded since 1885 with the exception of 1898 and 1903. The improvement in 1935 was due to an increase in the number of births and was continued in 1936. The rate of natural increase, which has been falling for over 60 years, has been at a record low figure in each successive year from 1930 to 1934, but slight increases occurred in 1935 and 1936.

The total rate of increase in the population in 1931 was the lowest annual rate since New South Wales has been within its present boundaries, except in 1915 and 1916, when large numbers of troops were transferred overseas.

Details of migration to and from the State will be found on later pages.

## DISTRIBUTION OF POPULATION.

The population of New South Wales is distributed in a rather remarkable manner. At the 31st December, 1936, the city of Sydney contained 87,770 persons in a small area surrounded by an extensive group of suburbs with 1,179,580 inhabitants, making a total of 1,267,350 dwellers in the metropolis. Then scattered throughout the State are 124 municipalities, with a total population of 576,610; of these 11 municipalities in the County of Cumberland contained 50,410 persons, and the large mining centres of Newcastle and suburbs, Broken Hill, Cessnock, Lithgow and Wollongong, 176,750 inhabitants; leaving 349,450 in the 98 rural towns incorporated as municipalities. Distributed over the remainder of the State—99.3 per cent. of its area—are 832,550 persons, of whom about one-third live in unincorporated towns of 500 persons or more. Only 19,080 live in the unincorporated portion of the Western Division, which covers 40.5 per cent. of the area of the State.

The distribution of population at the 31st December, 1936, together with the proportion in each division and the average population per square mile, are shown in the following table:—

Division.	Area (including Harbours, Rivers and Lakes).	Population at 31st December, 1936, excluding full blood Aborigines.		
		Total.	Proportion in each Division	Average per sq. mile.
	sq. miles.		per cent.	
Sydney ... ..	5	87,770	3.27	17,554.0
Suburbs of Sydney ... ..	240	1,179,580	43.99	4,914.9
Metropolis ... ..	245	1,267,350	47.26	5,172.9
Country Municipalities ... ..	1,893	576,610	21.50	304.6
Country Shires ... ..	181,872	813,470	30.33	4.5
Western Division (Part unincorporated) ... ..	125,417	19,080	0.71	0.2
Lord Howe Island ... ..	5	164	0.01	33.0
Migratory*	.....	5,062	0.19	...
Total, New South Wales ...	309,432	2,681,736	100.00	8.7

\* Shipping and railway travellers.

If allowance be made for those deriving their livelihood from the city but residing in the extra-metropolitan area, the population of such extended metropolitan area would be one-half of the total. About one-fifth of the people reside in the country municipalities, and less than one-third in the remaining rural districts.

The density of population diminishes rapidly from city, suburban, country urban to rural districts. The average density of population in New South Wales, though low, is greater than that of any other State of the Commonwealth except Victoria and Tasmania.

The low average in New South Wales—8.7 per square mile—is due largely to the inclusion of the extensive and practically unpeopled Western Division, much of which must remain sparsely settled until means are found to overcome its natural disability of a low average rainfall. At the 31st December, 1936, the average density of population in the Eastern and Central Divisions of the State was 14.3 persons per square mile.

*Urban and Rural Population.*

A comparison of the urban and rural population of the State at the last five censuses reveals that the population of New South Wales, in common with that of most other countries of the world, tends to congregate in metropolitan and urban centres. In the following table the population shown represents the total under each classification at each census, and no allowance has been made for changes in boundaries. The shipping and aboriginal elements have been omitted from the four main headings and shown separately. The number of country municipalities increased considerably between 1891 and 1901, but has since declined. The growth shown is due in part to the inclusion of new settlements and in part to the growth of urban areas existing at earlier censuses.

Division.	1891.	1901.	1911.	1921.	1933.
1. Metropolis (excluding shipping)	383,333	481,830	629,503	899,059	1,235,267
2. Municipalities outside the Metropolis ... ..	304,905	370,078	421,714	525,708	563,081
3. Quasi-urban localities with population exceeding 500 ...	51,963	81,484	175,303	190,556	273,572
4. Remainder of State (Rural) ‡...	379,776§	412,302	412,058	475,582	523,727
5. Total ... ..	1,119,977	1,345,694	1,638,578	2,090,905	2,595,647
6. Federal Capital Territory* ...	1,456	1,535	1,724	2,572	8,947
7. Shipping ... ..	5,649	8,026	8,051	9,355	5,039†
8. Lord Howe Island ... ..	55	100	105	111	161
9. Full Blood Aborigines... ..	5,097	3,778	2,012	1,597	1,034
10. Total, New South Wales and Federal Capital Territory ...	1,132,234	1,359,133	1,650,470	2,104,540	2,610,828
Proportion per cent. to total (5), of—	per cent.	per cent.	per cent.	per cent.	per cent.
1. Metropolis ... ..	34.3	35.7	38.4	43.0	47.6
2. Municipalities outside Metro- polis ... ..	27.3	27.5	25.7	25.1	21.7
3. Quasi-urban ... ..	4.6	6.1	10.7	9.1	10.5
4. Rural ... ..	33.8	30.7	25.2	22.8	20.2
	100.0	100.0	100.0	100.0	100.0

\* Ceded to Commonwealth 1st January, 1911. † Including 1,020 railway travellers. ‡ Includes persons living in portions of municipal towns outside boundaries of municipality (numbering over 40,000 in 1921 and 1933). § Includes 3,133 half-caste aborigines resident in various divisions.

Over the period of forty-two years the total population shown as item 5 in the above table increased by 131.8 per cent. The population of the metropolitan area developed more rapidly than that of any other division—growing by 222.2 per cent.; the municipalities by 84.7 per cent., and rural areas by 86 per cent.

Since most of the larger towns of the State are incorporated as municipalities, the populations of the municipalities, and of the shires with the unincorporated areas, may be considered to indicate respectively, with approximate accuracy, the division of the population into its urban and rural elements. An analysis made on these lines at each of the last two censuses shows the relative development in the past twelve and one quarter years of urban and rural portions of the State in the various territorial

divisions shown on the map in the frontispiece. In the following table the same municipalities and the same shire areas are treated in every division for both years.

Division.	Population of Municipalities.		Population of Shires.		Increase in Population   1921 to 1933.			
	1921.	1933.	1921.	1933.	Number.		Per cent.	
					Municipalities.	Shires.	Municipalities.	Shires.
Cumberland ... ..	1,038,139*	1,334,217*	14,731†	25,859†	200,078	10,628	28.5	72.1
Coast—								
North ... ..	33,674	43,527	89,478	102,980	9,853	13,502	29.3	15.1
Hunter and Manning	114,087	154,668	128,785	147,344	40,581	18,559	35.6	14.4
South ... ..	42,567	53,781	40,183	52,036	11,214	5,853	26.3	12.7
Tableland—								
North ... ..	19,969	22,653	31,371	31,428	2,684	57	13.4	.2
Central ... ..	55,540	58,521	74,455	82,722	2,981	8,267	5.4	11.1
South ... ..	19,854	24,634	26,315	25,322	4,780	(-) 993	24.1	(-) 3.8
Western Slopes—								
North ... ..	17,865	21,996	33,654	41,064	4,131	7,410	23.1	22.0
Central ... ..	17,329	23,917	34,870	39,801	6,588	4,934	38.0	14.1
South ... ..	37,479	47,364	58,514	68,754	9,885	10,240	26.4	17.5
Central Plains—								
North ... ..	6,302	8,301	17,049	21,380	1,999	4,331	31.7	25.4
Central ... ..	6,197	8,401	13,444	19,324	2,204	5,880	35.6	43.7
Riverina ... ..	11,803	15,140	51,629	69,177	3,277	17,548	27.6	34.0
Western Division ...	32,541	33,403	14,772†	18,591†	862	3,819	2.6	25.9
Whole State   ... ..	1,453,406	1,850,523	635,250	745,285	397,117	110,035	27.3	17.3

\* Includes Shires in the Extra-Metropolitan Area. † Non-metropolitan Shires and Lord Howe Island.  
‡ Unincorporated. || Exclusive of Shipping and Railway travellers.

In the foregoing table the migratory population—shipping and railway travellers—has not been included in the population. This, however, accounted for only 0.2 per cent. of the total population in 1933, therefore its omission does not affect the comparison materially.

The incorporated urban districts now contain slightly more than two-thirds of the inhabitants of the State, having increased in population by 397,117 or 27.32 per cent. in the last twelve and one-quarter years, as compared with an increase of 110,035, or 17.32 per cent. in the shires and unincorporated areas. Of the total increase, 58.37 per cent. occurred in the municipal areas of the division of Cumberland, principally in those which compose the metropolitan area; and considerable growth is evident in the municipalities of the Hunter and Manning division, principally in Newcastle and suburbs, in which the growth was 23.84 per cent. In the South Coast, due to progress of the mining and industrial centre about Wollongong, there was also substantial increase in municipal population, whilst agricultural development has tended to build up the towns of the Southern Tableland, all the divisions of the Western Slopes, and the Central Plains.

A feature of the table is an improvement in the growth of shire population throughout the period. Whereas, in the previous intercensal period of ten years the population of the shires and other unincorporated areas increased by only 10.4 per cent., the growth of these in the twelve and one-quarter years between 1921 and 1933 was 17.3 per cent. In the Riverina, due to the development of irrigation farming and closer settlement, shire population increased by 17,548, or about one-third, while in the Hunter and Manning and North Coast divisions the increase in shire population has been substantial—18,559 and 13,502 respectively—though not as great proportionately. Growth was most rapid in the Central Plains, where the shires gained 5,880 inhabitants or about 44 per cent. Nevertheless, the table clearly demonstrates the very definite tendency of population to concentrate in the metropolis. Although some country division gains have

been proportionately larger they also have been concentrated in a small number of the larger towns.

Although in no case was there an actual loss of population in the country divisions of the State during the latest intercensal period, it is apparent that the growth of population in these divisions has been disproportionate to the growth of metropolitan population.

With the mechanisation and increasing efficiency of the rural industries a tendency for fewer persons to be employed in those industries, and therefore, for rural population to be diverted to centres where secondary industries are concentrated, may be regarded as a natural phenomenon. The redistribution of the population of New South Wales which has occurred in recent decades is probably, in large part, attributable to such causes as these, and to the extent that this is so, it is a consequence of the economic development of the State. As a result of the economic depression, the trend toward greater urbanisation of the population has been somewhat disturbed during the last few years by urban dwellers seeking occupation on the land and in other primary pursuits.

The extent to which the movement of population has been responsible for the loss of population in the country districts is seen clearly only when the natural increase in each division is related to the growth of population, and the amount and direction of migration is brought into relief. The analysis made below furnishes evidence that emigration has occurred to a considerable extent from most of the country districts during the past twenty-two and one-quarter years. The table is compiled on the basis of local government areas, and separate account is taken in each division of migration and of natural increase as factors affecting the growth of population. The figures, however, are not entirely accurate, because the births and deaths which occurred before 1st January, 1927, were allocated to the division in which they occurred, and not according to the practice adopted on the date mentioned, i.e., to the place of usual residence of the mother or deceased person as the case may be.

Division.	Population at Census.*			Total Increase in Population.		
	1911.	1921.	1933.	1911 to 1921.	1921 to 1933.	1911 to 1933.
Cumberland† ...	713,857	1,052,870	1,359,576	339,013	306,706	645,719
Coast—						
North ...	101,656	123,152	146,507	21,496	23,355	44,851
Hunter and Manning ...	183,810	242,872	302,012	59,062	59,140	118,202
South ...	79,412	88,750	105,817	9,338	17,067	26,405
Tableland—						
North ...	51,769	51,340	54,081	(-) 429	2,741	2,312
Central ...	119,143	129,995	141,243	10,852	11,248	22,100
South ...	44,201	46,169	49,956	1,968	3,787	5,755
Western Slopes—						
North ...	55,543	51,519	63,060	(-) 4,024	11,541	7,517
Central ...	49,235	52,199	63,721	2,964	11,522	14,486
South ...	88,940	95,993	116,118	7,053	20,125	27,178
Central Plains—						
North ...	22,994	23,351	29,681	357	6,330	6,637
Central ...	20,073	19,641	27,725	(-) 432	8,084	7,652
Riverina ...	48,885	63,492	84,317	14,607	20,825	35,432
Western Division ...	59,165	47,313	51,994	(-) 11,852	4,681	(-) 7,171
Whole State ...	1,638,683	2,088,656	2,595,808	449,973	507,152	957,125

\* Excluding full blood Aborigines and Migratory Population.  
(-) Denotes decrease.

† Embracing the Metropolis.

Division.	Natural Increase.†		Net Immigration.		Total Net Immigration, 1911 to 1933.	
	1911 to 1921.	1921 to 1933.	1911 to 1921.	1921 to 1933.	Numerical.	As per-centage of Population in 1911.
Cumberland† ...	124,488	149,729	214,525	156,977	371,502	Per cent. 52·04
Coast—						
North ...	26,400	31,542	(-) 4,904	(-) 8,187	(-) 13,091	(-) 12·88
Hunter and Manning ...	42,799	53,408	16,263	5,732	21,995	11·97
South ...	14,260	14,636	(-) 4,922	2,431	(-) 2,491	(-) 3·14
Tableland—						
North ...	12,413	11,592	(-) 12,842	(-) 8,851	(-) 21,693	(-) 41·90
Central ...	20,655	23,402	(-) 9,803	(-) 12,154	(-) 21,957	(-) 18·43
South ...	7,894	9,242	(-) 5,896	(-) 5,455	(-) 11,351	(-) 25·68
Western Slopes—						
North ...	10,663	12,292	(-) 14,687	(-) 751	(-) 15,438	(-) 27·79
Central ...	10,479	13,358	(-) 7,515	(-) 1,836	(-) 9,351	(-) 18·99
South ...	17,942	23,810	(-) 10,889	(-) 3,685	(-) 14,574	(-) 16·39
Central Plains—						
North ...	5,569	6,344	(-) 5,212	(-) 14	(-) 5,226	(-) 22·73
Central ...	4,268	4,913	(-) 4,700	3,171	(-) 1,529	(-) 7·62
Riverina ...	11,851	15,734	2,756	5,091	7,847	16·05
Western Division ...	8,879	7,319	(-) 20,731	(-) 2,638	(-) 23,369	(-) 39·50
Whole State* ...	318,530	377,321	131,443	129,831	261,274	15·94

\* Excluding full blood Aborigines and Migratory Population.

† Embracing the Metropolis.

‡ Includes Aborigines the numbers of which are not sufficiently great to vitiate the comparisons.

(-) Denotes decrease.

A similar comparison for the years 1891 to 1921 was given on page 236 of the Official Year Book of 1922. Since then the statistical boundaries of divisions have been altered from a county basis to conform to the boundaries of local government areas. It is, consequently, impracticable to continue the comparison on that basis, whilst the present tables cannot be extended to an earlier census than 1911.

The table reveals that over the period of twenty-two and one-quarter years under review an excess of emigration occurred in all divisions of the State, with the exception of the Cumberland, Hunter and Manning and Riverina divisions. The Cumberland division, containing the metropolis, absorbed, not only the net immigration from overseas and interstate, but as well, gained a large part of the natural increase in the rural divisions. To some extent the movement toward concentration of population in the metropolis slackened between 1921 and 1933, but, nevertheless, the net loss of population by emigration from all divisions of the State, exclusive of Cumberland, reached a total of 110,074 over that period representing the equivalent of 11·9 per cent. of the population of those divisions in 1911. It is a striking fact that the Western Division not only lost the whole of its natural increase, but actually a proportion of the population it contained in 1911 equal to 13·7 per cent. All the Tableland divisions lost a large proportion of their natural increase, ranging from 49·8 per cent. in the Central to 90·3 per cent. in the Northern, whilst the North Western Plain failed to retain 66·8 per cent. of its natural increase.

Between 1911 and 1933 the Cumberland division gained 371,502 inhabitants by migration, but to only two country divisions was there an excess of immigration; these were the Hunter and Manning divisions, which gained 21,995, and the Riverina, 7,847, and in each of these cases the increment was due to special factors. Migrants moved freely from nearly every part of the State to the metropolis, but only the new industrial developments at Newcastle and the development of coalfields in the Hunter Valley, and the establishment of settlers on the Murrumbidgee Irrigation Area, attracted effective migrants to ex-metropolitan districts. No less than eleven divisions of the State, covering about 268,210 square miles, lost population by migration during the twenty-two and one-quarter years.

An analysis covering the period from 1891 to 1933, ignoring the differences in statistical boundaries, shows that the Riverina was the only country division to retain, over each census period, the whole of the natural increase in the division, whilst in only two other divisions—Hunter and Manning and Central Western Plains—did the aggregate growth in population exceed the total natural increase. During that period every Tableland Division experienced an excess of emigration in every intercensal period. A similar condition of affairs was also experienced in the South Western Slopes and the Western Division, and the South Coast lost almost the whole of its natural increase. The net immigration to the Cumberland division reached a total of 490,443 over the four intercensal periods during which all other divisions sustained a net emigration of 188,659 inhabitants.

In the final column of the table the net immigration (or emigration) of each division over the period 1911 to 1933 is expressed as a percentage of population in 1911, serving to bring into relief the extent to which changes have taken place in the distribution of the population. The outstanding feature is the marked tendency of the metropolitan population to grow rapidly at the expense of the rural areas of the State.

#### *The Population of the Metropolis.*

Up to 31st December, 1928, the metropolis was taken to include the City of Sydney, forty municipalities, the Ku-ring-gai Shire (proclaimed a municipality 1st November, 1928), and the islands of Port Jackson, embracing an area of 181 square miles. From 1st January, 1929, the municipalities of Auburn, Bankstown, Granville, Lidcombe, and Parramatta were added, and the area embraced by the metropolis was 233 square miles. From the 1st January, 1933, the statistical boundaries of the metropolis were further extended to include the municipalities of Dundas, Ermington and Rydalmere, and the Pitt and Merrylands wards of Holroyd municipality, so that the metropolitan area now embraces all of the municipalities shown in the following table. This is the area to which the population and vital statistics of the metropolis refer, and now has an area of 245 square miles.

A definition of an extended metropolitan area was given in Schedule Four of the Local Government Act, 1919. Apart from some minor variations in boundary it coincides with the metropolis already described except that part of Holroyd municipality is excluded and the shires of Sutherland and Warringah and portion of Hornsby Shire are included. As these shires contain centres of population more or less of a suburban character, since a large proportion of their inhabitants gain their livelihood in the city, they have been taken into account in arriving at the extra-metropolitan population. It is practicable to include only the whole of Hornsby Shire instead of the part. The total area of the extended metropolitan area on this basis is 688 square miles.

The following statement shows the population of each municipality within the present boundaries of the metropolis, together with the extra-metropolitan shires, at the censuses of 1911, 1921, and 1933, and at 31st December, 1936, excluding shipping and full blood aboriginals.

Municipality.	Population.					
	At Census—			Increase per cent. 1911 to 1933.	31st December, 1936.	
	1911.	1921.	1933.		Estimated Population.	Density per acre.
City of Sydney ...	112,921	104,153	88,308	per cent. (-) 22	87,770	27·26
Inner Industrial—						
Paddington ...	24,317	26,364	24,674	1	24,530	58·27
Redfern ...	24,427	23,978	18,834	(-) 23	18,500	45·79
Waterloo ...	10,072	11,199	11,659	16	11,700	14·15
Alexandria ...	10,123	9,793	9,018	(-) 11	8,870	8·44
Mascot ...	5,836	10,929	14,363	146	15,200	6·84
Botany ...	4,409	6,214	8,287	88	8,660	3·99
St. Peters ...	8,410	12,700	12,554	49	12,560	13·92
Erskineville ...	7,299	7,553	6,645	(-) 9	6,560	35·27
Newtown ...	26,498	28,168	25,290	(-) 5	25,000	52·08
Darlington ...	3,816	3,651	3,953	(-) 20	2,970	55·00
Glebe ...	21,943	22,754	19,874	(-) 9	19,600	37·84
Annandale ...	11,240	12,648	12,205	9	12,140	35·09
Leichhardt ...	24,254	29,356	30,209	25	30,340	26·27
Balmain ...	32,038	32,104	28,272	(-) 12	28,060	28·66
Total ...	214,682	237,411	224,937	5	224,630	19·18
Illawarra-Bankstown—						
Marrickville ...	30,653	42,240	45,385	48	45,840	24·27
Rockdale ...	14,095	25,189	39,123	178	40,530	7·94
Bexley ...	6,517	14,746	20,539	215	21,120	11·06
Kogarah ...	6,953	18,226	30,646	341	32,100	6·68
Hurstville ...	6,533	13,394	22,663	247	23,810	3·89
Canterbury ...	11,335	37,639	79,050	597	81,350	9·85
Enfield ...	3,444	8,530	14,782	329	15,030	8·96
Bankstown ...	2,039	10,670	25,384	1,145	26,850	1·40
Total ...	81,569	170,634	277,572	240	286,630	5·85
Inner Western—						
Petersham ...	21,712	26,236	26,941	24	27,280	32·09
Ashfield ...	20,431	33,636	39,356	93	40,100	19·64
Drumoyne ...	8,678	18,761	29,215	237	30,050	15·36
Burwood ...	9,380	15,709	19,373	107	19,900	17·99
Strathfield ...	4,046	7,594	12,147	200	12,700	6·92
Homebush ...	676	1,622	3,189	372	3,210	5·39
Concord ...	4,076	11,013	23,213	470	23,830	8·77
Total ...	68,999	114,571	153,434	122	157,070	14·15
Outer Western—						
Lidcombe ...	5,418	10,522	17,379	221	17,600	3·37
Auburn ...	5,559	13,563	20,114	262	20,400	7·88
Granville ...	7,231	13,328	19,718	173	20,300	5·03
Parramatta ...	12,465	14,594	18,076	45	18,630	8·35
Holroyd* ...	†2,082	†4,626	8,426	305	8,850	4·02
Total ...	32,755	56,633	83,713	156	85,780	5·27

\* Pitt and Merrylands Wards only.

† Estimated.

*The Population of the Metropolis—continued.*

Municipality.	Population.					
	At Census—			Increase per cent 1911 to 1933.	31st December, 1936.	
	1911.	1921.	1933.		Estimated Population	Density per acre.
Northern—				per cent.		
Manly ... ..	10,465	18,507	23,259	122	24,400	7·87
Mosman ... ..	13,243	20,056	23,665	79	24,500	11·45
North Sydney ... ..	34,646	48,438	49,752	44	50,770	20·08
Willoughby ... ..	13,036	28,067	42,511	226	44,330	8·10
Ku-ring-gai ... ..	9,158	19,209	27,931	195	30,560	1·51
Lane Cove ... ..	3,306	7,592	15,138	358	15,830	6·17
Hunter's Hill ... ..	5,013	7,300	8,989	79	9,240	6·53
Ryde ... ..	5,281	14,854	27,861	428	29,320	4·21
Eastwood ... ..	968	2,123	3,025	212	3,180	1·08
Dundas ... ..	1,136	3,523	6,017	431	6,420	2·36
Ermington and Rydalmere	1,716	1,981	2,364	38	2,400	1·18
Total ... ..	98,268	171,660	230,512	135	240,950	4·62
Eastern—						
Vauchuse ... ..	1,672	3,727	7,205	331	7,640	9·60
Woollahra ... ..	16,989	25,439	34,727	104	36,640	19·44
Waverley ... ..	19,831	36,797	55,902	182	58,900	26·96
Randwick ... ..	19,463	59,841	78,957	306	81,340	9·54
Total ... ..	57,955	116,804	176,791	205	184,520	13·78
Total, Metropolis Proper†	667,149	971,866	1,235,267	85	1,267,350	8·08
Hornsby Shire ... ..	8,901	15,287	22,596	154	23,530	·19
Sutherland Shire ... ..	2,896	7,705	13,525	367	14,660	·16
Warringah Shire ... ..	2,823	9,643	16,054	469	17,070	·26
Total, Metropolitan and Extra—Metropolitan	681,769	1,004,501	1,287,442	89	1,322,610	3·00

† 1933 Boundaries—for previous changes see text.

The population of the metropolis is not distributed evenly. At the 31st December, 1936, the City of Sydney and the inner industrial suburbs, although occupying only 9·5 per cent. of the area of the metropolis, nevertheless contained 24·6 per cent. of the inhabitants. Over two-fifths of this area the density of population ranged from 26 to 58 persons per acre. On the other hand, in some of the outlying suburbs the density is little more than one or two persons to the acre, but there has been considerable development in these areas in recent years, and the scattered nature of the population tended to diminish rapidly until progress was halted by the economic depression.

Some of the suburbs nearest the city have attained their maximum development as residential districts and some are even losing population as dwellings are replaced by industrial and commercial establishments. Improved transport facilities have also tended to a movement of population from the more congested areas to the less thickly-populated suburbs. Whereas the population in the City of Sydney and the inner industrial suburbs decreased by 4 per cent. the percentage increases in the other groups of suburbs were:—Inner western 122, northern 135, outer western 156, eastern 205, Illawarra-Bankstown 240 and extra metropolitan 257. Between the years 1911 and 1921 there was a decrease in population of

over 5,000 in the city and eight of the nearest suburbs,† and in the period from 1921 to 1933 the decrease of population in the same area was over 33,000 persons, representing a decrease of nearly 16 per cent. over the twenty-two and one quarter years. On the other hand, the aggregate population of the outlying suburbs of Bankstown, Canterbury, Concord, Dundas, Ryde, Homebush, Lane Cove, Kogarah, Vaucluse, Enfield, Randwick, increased from 59,381 in 1911 to 168,237 in 1921 and to 311,442 in 1933 or by 424 per cent. in the twenty-two and one quarter years. Despite this marked growth the density of population in these suburbs is but 5.3 persons per acre compared with 29.1 persons per acre in the city and eight adjacent suburbs referred to previously. There is ample room for a very great increase in the metropolitan population within the present boundaries without creating undue congestion. Assuming that the average of about 6 dwellings to the acre existing in the inlying suburbs‡ were reached throughout the area comprised in the metropolitan municipalities and the existing average of about 4.2 persons per dwelling were maintained, a population of about 4,000,000 persons might be attained within the present metropolitan boundaries.

The population of the metropolis proper, excluding aboriginals and shipping, at each census since 1861, is shown in the following table, together with the proportion which the metropolitan population bears to that of the whole State. The latest estimate made subsequent to the census is also shown:—

Year.	Population.			Increase during Interval.		Proportion of Males to Total Population.	Proportion of Population of State.
	Males.	Females.	Total.	Numerical.	Per cent.		
CENSUS RECORDS.							
						per cent.	per cent.
1861	46,550	49,239	95,789	41,865*	77.64*	48.60	27.3
1871	66,707	70,879	137,586	41,797	43.63	48.50	27.4
1881	112,763	112,176	224,939	87,353	63.49	50.13	30.0
1891	193,753	189,580	383,333	158,394	70.42	50.54	34.0
1901	236,018	245,812	481,830	98,497	25.69	48.98	35.6
1911	305,728	323,775	629,503	147,673	30.65	48.57	38.2
1921	433,492	465,567	899,059	269,556	42.82	48.22	42.8
1933 (a)	531,902	585,982	1,117,884	218,825	24.34	47.58	43.0
(b)	591,104	644,163	1,235,267	336,206	37.41	47.85	47.5
ESTIMATE.							
31st Dec. 1936 (b)	606,450	660,900	1,267,350	32,083¶	2.60¶	47.85	47.3

\* Since 1351. (a) Same area as in 1921. (b) Area as extended on 1st January, 1933.

¶ Since Census of 1933. For details of changes in boundaries, see text of this section.

To permit of more accurate comparison with previous censuses the figures for the 1933 census have been shown on the basis of the past and present boundaries.

The tendency for population to concentrate in the metropolis was very marked in the period from 1871 to 1921, but between 1921 and 1933 it slackened appreciably.

† Annandale, Balmain, Glebe, Erskineville, Newtown, Redfern, Darlington and Alexandria.

‡ Leichhardt, Ashfield, Marrickville, Petersham, Balmain and Paddington.

Since 1891 the proportion of females in the metropolis has increased, so that at the census of 1933 there was an excess of four females in every hundred of the population.

The following comparison of the metropolis as constituted at 31st December, 1936, with the density of population in the large cities of England as determined at the census of 27th April, 1931, is interesting:—

City.	Area.	Population.	Average Number of Persons per acre.
	Acres.		
London (Registration Area) ...	74,850	4,397,003	58·7
Birmingham ... ..	51,147	1,002,603	19·6
Liverpool ... ..	24,795	855,539	34·5
Manchester ... ..	27,257	766,378	28·1
Sydney* ... ..	156,865	1,267,350	8·1

\* Municipalities only, 31st December, 1936.

The population of the capital cities (including suburbs) of the States of the Commonwealth is shown below:—

Metropolis.	Area at 1933 Census.	Population.						
		Census, 1911.*	Census, 1921.*	Census, 1933*				
		Total.	Total.	Males.	Females.	Total.	Proportion to Population of Whole State.	Density per acre.
	acres.						per cent.	
Sydney‡ ...	156,149	665,067	967,240	591,104	644,163	1,235,267	47·5	7·91
Melbourne ...	125,926	588,971	766,465	464,775	527,159	991,934	54·5	7·88
Adelaide ...	102,987	189,646	255,375	147,936	164,683	312,619	53·8	3·04
Brisbane ...	246,400	139,480	209,946	143,525	156,223	299,748	31·6	1·22
Perth ...	119,520	106,792	154,873	99,288	108,152	207,440	47·3	1·74
Hobart ...	54,890	39,937	52,361	28,351	32,055	60,406	26·5	1·10

\* Excluding aboriginals and Shipping.

‡ 1933 Boundaries.

### THE TOWNS OF NEW SOUTH WALES.

As might be expected from the nature of the industries of the State there are in New South Wales comparatively few large towns. Outside the metropolitan area, the only towns of outstanding magnitude are Newcastle and Broken Hill, and the existence of both is due to the rich mineral deposits in their neighbourhood. Cessnock, the fourth, and Lithgow the fifth, largest towns outside the Division of Cumberland, are also dependent on mining. Apart from the centres in the County of Cumberland dependent upon the city, but including those already mentioned, there were, at the census of 1933, only eleven country towns with a population exceeding 10,000; thirteen, including one in a shire, between 5,000 and 10,000; and twenty-eight, including seven in shires, between 3,000 and 5,000.

The following table affords a comparison of the populations at the last five censuses of the towns which at the end of 1936 had more than 3,000 inhabitants, excluding aboriginals and shipping, in the order of numerical importance at that date.

Municipality.	Population.					
	Census 1891.	Census 1901.	Census 1911.	Census 1921.	Census 1933.	Estimated Dec., 1936.
Sydney and Suburbs*	383,333	481,830	629,503§	899,059	1,235,267§	1,267,350
Newcastle and Suburbs ...	49,910	53,741	54,603	84,372	104,485	108,720
Broken Hill ...	19,789	27,500	30,972	26,337	26,925	27,400
Goulburn ...	10,916	10,612	10,023	12,715	14,849	15,260
Cessnock† ...	203	165	5,102	9,340	14,385	14,400
Lithgow ...	3,865	5,268	8,196	13,275	13,444	13,570
Wollongong ...	3,041	3,545	4,660	6,708	11,403	12,660
Lismore ...	2,925	4,378	7,381	8,700	11,762	12,620
Maitland (East and West)	10,214	10,073	11,313	12,008	12,329	12,580
Wagga Wagga ...	4,596	5,108	6,419	7,679	11,631	12,330
Albury ...	5,447	5,821	6,309	7,751	10,543	11,070
Bathurst ...	9,162	9,223	8,575	9,440	10,413	10,700
Tamworth ...	4,602	5,799	7,145	7,264	9,913	10,530
Orange ...	5,064	6,331	6,721	7,398	9,634	10,080
Dubbo ...	3,551	3,409	4,452	5,032	8,344	8,560
Grafton ...	3,618	4,171	4,681	4,593	6,411	7,070
Armidale ...	3,826	4,249	4,738	5,407	6,794	7,040
Katoomba ...	1,592	2,270	4,923	9,055	6,445	6,800
Parkes ...	2,449	3,181	2,935	3,941	5,846	6,080
Casino ...	1,486	1,926	3,420	3,455	5,287	5,870
Inverell ...	2,534	3,293	4,549	4,369	5,305	5,720
Forbes ...	3,011	4,294	4,436	4,376	5,355	5,569
Glen Innes ...	2,532	2,918	4,089	4,974	5,352	5,450
Cowra ...	1,546	1,811	3,271	3,716	5,056	5,320
Kempsey ...	2,194	2,329	2,862	3,613	4,824	5,170
Taree ...	716	871	1,205	1,765	4,581	5,000
Cootamundra ...	2,026	2,424	2,967	3,531	4,683	4,890
Moree ...	1,143	2,298	2,931	3,020	4,355	4,670
Wellington ...	1,545	2,984	3,958	3,924	4,320	4,440
Murwillumbah†	492	772	2,206	2,861	3,895	4,400
Junee ...	1,682	2,190	2,531	3,560	4,213	4,380
Narrandera ...	1,815	2,255	2,374	2,985	4,119	4,250
Young ...	2,746	2,755	3,139	3,283	4,011	4,200
Queanbeyan ...	1,262	1,219	1,273	1,825	4,019	4,130
Mudgee ...	2,410	2,789	2,942	3,170	3,993	4,110
Temora ...	915	1,603	2,784	3,048	3,823	4,110
Penrith* ...	3,099	3,539	3,682	3,604	3,911	4,050
Gunnedah ...	1,362	1,910	3,005	2,664	3,591	3,920
Singleton ...	2,595	2,872	2,996	3,270	3,668	3,800
Windsor* ...	2,033	2,039	3,466	3,808	3,247	3,390
Muswellbrook ...	1,298	1,710	1,861	2,152	3,287	3,370
Deniliquin ...	2,273	2,644	2,494	2,660	3,192	3,370
Hay ...	2,741	3,012	2,461	2,572	3,156	3,300
Ballina ...	1,084	1,819	2,061	2,768	3,042	3,140
Bowral ...	2,258	1,752	1,751	2,620	3,005	3,100

\* In County Cumberland.

† Incorporated 1902.

‡ Incorporated 1926 and district enlarged.

§ Area extended since previous census.

In addition to the municipalities shown above, there are a number of relatively large towns not incorporated as municipalities. A number of these situated in the extra-metropolitan shires of Hornsby, Sutherland and Warringah have populations more or less dependent upon the city. At the census of 30th June, 1933, they were:—Hornsby, 5,068; Cronulla, 3,156; Sutherland, 3,143; Dee Why, 3,030. Those situated in the country were—Kurri Kurri, 6,341; Cardiff, 3,432; Weston, 3,346; Thirroul, 3,151;

Portland, 3,082; and Corrimal, 3,042. The foregoing list excludes municipalities with extensive areas or whose boundaries embrace more than one distinct locality.

The population of these larger towns has grown at a fairly uniform rate during the whole of the period covered and some towns have shown rapid increase. Newcastle, after twenty years of slow progress, made rapid headway between 1911 and 1933, largely on account of the growth of its manufacturing industries. The growth of the rural towns of Lismore, Wagga Wagga, Albury, Dubbo, Taree and Queanbeyan, and the mining and industrial town of Wollongong in the last intercensal period has been marked. The other rural towns, on the whole, have maintained a steady growth throughout, but the decline of the silver-lead mining industry—due largely to derangement of the markets of the world—has arrested the growth of Broken Hill, where the population is now 4,000 less than in 1911. Lithgow, a coal-mining and partly manufacturing town, continued to grow rapidly until 1927, then the population began to decrease owing to slackness in the coal-mining industry and the gradual removal of the ironworks to Port Kembla. This movement has been reflected in a considerable increase in the population of Wollongong. By 1921 Goulburn had developed, after twenty years of stagnation, into the leading town of the interior not dependent on mining, and still occupies that place. Katoomba, a tourist centre 60 miles from Sydney, grew rapidly between 1901 and 1921. As the Census of 1933 was taken in mid-winter, and former censuses in early autumn, absence in the one case, and the presence in the others, of the tourist population vitiates comparison of the census figures in the case of this town.

#### SEX DISTRIBUTION.

As is the case in most of the younger countries, the population of New South Wales contains a surplus of males over females, although in older countries females are usually the more numerous.

The distribution of the sexes at each census from 1871 to 1933 was as follows:—

Year.	Distribution of Population in Sexes (excluding aborigines).				Males per 100 Females.
	Males.	Females.	Proportion of Males.	Proportion of Females.	
			per cent.	per cent.	
1871	274,842	228,156	54·64	45·36	121
1881	410,211	339,614	54·71	45·29	121
1891	609,666	517,471	54·09	45·91	118
1901	710,264	645,091	52·40	47·60	110
1911	857,698	780,036	52·08	47·92	109
1921	1,071,501	1,028,870	51·01	48·99	104
1933	1,318,471	1,282,376	50·69	49·31	103

The disparity in New South Wales is brought about by the operation of several factors. The development of the colony was first stimulated by the "gold rushes" and later depended on the pastoral and mining industries. This, combined with its remoteness from the Old World, led to far greater immigration of men than of women. In later years the predominance of males among immigrants tended to increase the disparity between the sexes. On the other hand, the higher rate of mortality among

males renders the natural increase of females the greater, despite the excess of male over female births. As a consequence the excess of males diminished, and the diminution was hastened by the war.

The effects of these forces are clearly seen in the following table, which shows the excess of males at each quinquennial age group at each census from 1891 to 1933:—

Age Group.	Excess of Males.					Males per 100 Females.				
	1891.	1901.	1911.	1921.	1933.	1891.	1901.	1911.	1921.	1933.
Years.										
0-4 .....	2,285	1,755	3,140	3,718	4,757	103	102	103	103	104
5-9 .....	1,535	2,243	2,017	3,144	3,759	102	103	102	103	103
10-14 .....	975	1,485	1,138	2,732	3,255	102	102	102	103	103
15-19 .....	(-) 224	(-) 313	1,966	1,774	2,913	100	100	102	102	102
20-24 .....	4,408	(-) 2,370	4,464	(-) 5,420	3,561	108	96	105	94	103
25-29 .....	12,910	230	4,040	(-) 3,794	5,094	128	100	106	96	105
30-34 .....	15,356	5,899	4,332	4,058	1,903	142	112	107	105	102
35-39 .....	13,010	10,742	4,413	3,851	(-) 5,467	148	126	109	105	94
40-44 .....	9,132	11,494	7,485	4,510	1,867	142	134	117	107	102
45-49 .....	8,293	9,337	9,055	3,996	5,025	145	139	124	108	106
50-54 .....	7,858	6,288	9,381	6,648	4,586	154	133	131	116	107
55-59 .....	5,876	4,258	6,639	6,843	1,549	155	128	132	120	103
60-64 .....	4,793	4,541	3,671	5,283	1,054	163	137	122	119	103
65-69 .....	2,060	3,768	2,356	3,606	1,659	142	141	118	120	105
70-74 .....	1,339	2,570	2,026	1,013	1,145	137	149	124	108	105
75-79 .....	934	734	1,416	268	83	149	126	127	104	101
80-84 .....	415	309	496	35	(-) 412	147	120	122	101	93
85 and over .....	199	122	(-) 60	(-) 52	(-) 604	150	118	94	97	80
N.S. ....	898	2,072	687	418	368	...	...	...	...	...
Total .....	92,052*	65,164*	68,662	42,631	36,095	120	110	109	104	103

\* Full blood aboriginals are excluded throughout, but in 1891 and 1901 half-caste aboriginals in a nomadic state are also excluded.

The censuses of 1861 to 1881 disclose excessive masculinity at ages from the early twenties onwards. This was maintained by the greater net immigration of males than of females, especially in the period up to 1891. At the census of 1891 the excessive masculinity was apparent from age 25, but more especially from age 30, and the higher ages reflected the cumulative effects of earlier migration. After 1891 migration had no appreciable effect on the population for twenty years and when it again became prominent it was on a relatively lower scale than before. As a result the excessive masculinity at age 25 onwards in 1891 is noticeable at the progressively later ages in each succeeding census, while the greater male mortality at higher ages was beginning to assert its influence. By 1921 the masculinity in each age group was assuming a more natural and stable order. The excess of females at ages 20 to 29, in that year, was the result mainly of the loss of men at the war and the excess of male deaths in the influenza epidemic of 1919; a further factor being the immigration of war brides. This disturbance was still apparent in the age group 30-44 at the 1933 census. By 1933 the equalising effect of the greater male mortality after middle age was more apparent.

The numerical increase at the earlier ages is due principally to an increasing annual number of births until about 1928, but the masculinity reflects the average masculinity of births which varies between 105 and

106 males per 100 females. At these early ages migration has little effect and a natural order is observable in ages under 20 throughout the whole period shown in the table.

## AGE CONSTITUTION OF THE POPULATION.

As in many other countries, the average age of the population of New South Wales is increasing. Although variations in the age constitution have been due, in part, to immigration and the loss occasioned by war and epidemics, the greatest factors in this State are the steadily decreasing birth rate and an increase in the average duration of life.

The following table shows the number of persons in quinquennial age groups as recorded at each of the last two censuses, exclusive of full-blood aboriginals.

Age Group	4th April, 1921.			30th June, 1933.			Increase* 1921-1933.
	Males.	Females.	Total.	Males.	Females.	Total.	Total.
Years.							
0-4 ... ..	121,529	117,811	239,340	117,281	112,524	229,805	(-) 9,535
5-9 ... ..	118,284	115,149	233,424	127,806	124,041	251,841	18,417
10-14 ... ..	104,166	101,434	205,600	126,664	123,409	250,073	44,473
15-19 ... ..	88,476	86,702	175,178	123,438	120,525	243,963	68,785
20-24 ... ..	83,333	88,753	172,086	116,312	112,751	229,063	56,977
25-29 ... ..	87,361	91,155	178,516	105,279	100,185	205,464	26,948
30-34 ... ..	92,215	88,157	180,372	93,247	91,344	184,591	4,219
35-39 ... ..	79,737	75,886	155,623	87,139	92,606	179,745	24,122
40-44 ... ..	66,785	62,275	129,060	91,077	89,210	180,287	51,227
45-49 ... ..	54,723	50,727	105,450	85,401	80,376	165,777	60,327
50-54 ... ..	49,235	42,587	91,822	69,000	64,414	133,414	41,592
55-59 ... ..	41,877	35,034	76,911	50,674	49,125	99,799	22,888
60-64 ... ..	33,694	28,411	62,105	42,643	41,589	84,232	22,127
65-69 ... ..	21,737	18,131	39,868	33,452	31,793	65,245	25,377
70-74 ... ..	13,030	12,017	25,047	23,906	22,851	46,847	21,800
75-79 ... ..	7,698	7,430	15,128	13,351	13,268	26,619	11,491
80-84 ... ..	3,402	3,367	6,769	5,511	5,923	11,434	4,665
85 and over ...	1,580	1,632	3,212	2,389	2,993	5,382	2,170
Age not stated ...	2,639	2,221	4,860	3,817	3,449	7,266	2,406
Total ... ..	1,071,501	1,028,870	2,100,371	1,318,471	1,282,376	2,600,847	500,476

\* Minus sign (-) denotes decrease.

To eliminate a tendency to mis-statement at certain ages, and to distribute the unstated ages, the recorded figures have been subjected to a process of graduation or smoothing. The resultant graduated number of persons at each age at the censuses of 1921 and 1933 is shown in the "Statistical Register" for 1935-36.

An analysis of the sex distribution at various ages is reviewed on page 362.

The changing age constitution of the population is evident from the following table, which shows the proportion of persons recorded in quinquennial age groups at each census since 1861:—

Age Group.	Proportion per cent. of Total Population at Census.							
	1861.	1871.	1881.	1891.	1901.	1911.	1921.	1933.
Years.								
0-4	16.22	16.30	14.84	14.66	11.75	12.26	11.40	8.86
5-9	12.10	14.02	13.22	12.76	12.29	10.27	11.11	9.71
10-14	10.38	11.47	11.81	10.92	11.95	9.59	9.79	9.64
15-19	9.77	8.48	10.11	9.62	10.44	10.01	8.37	9.41
20-24	9.69	8.41	9.95	9.85	9.41	10.38	8.22	8.83
25-29	10.00	8.67	8.08	9.45	8.31	9.08	8.53	7.92
30-34	7.80	7.55	6.76	7.86	7.34	7.58	8.62	7.12
35-39	5.82	6.56	6.19	5.99	6.95	6.46	7.43	6.93
40-44	5.74	5.15	5.28	4.75	5.80	5.76	6.17	6.95
45-49	4.17	3.61	4.18	4.04	4.24	5.14	5.04	6.39
50-54	3.39	3.54	3.27	3.33	3.33	4.23	4.39	5.14
55-59	1.81	2.26	2.00	2.43	2.59	2.96	3.67	3.85
60-64	1.71	1.85	1.85	1.81	2.14	2.22	2.97	3.25
65-69	.64	.97	1.11	1.06	1.65	1.73	1.90	2.51
70-74	.43	.72	.74	.77	.96	1.17	1.20	1.81
75-79	.18	.25	.35	.42	.48	.73	.72	1.03
80-84	}	.15	.19	.26	{	.19	.30	.32
85 and over								
						.11	.13	.21
Total ...	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Under 15	38.70	41.79	39.87	38.34	35.99	32.12	32.30	28.21
15-64	59.90	56.08	57.67	59.13	60.55	63.82	63.41	65.79
65 and over	1.40	2.13	2.46	2.53	3.46	4.06	4.29	6.00
21 and over	†	48.06	48.02	49.93	51.62	55.77	57.57	60.55

† Not available.

1861-1911 calculated from total population including aboriginals. 1921 and 1933 excluding aboriginals.

The age constitution of the population in 1861 was rendered abnormal by the large influx of persons in early manhood during the gold rushes of the preceding decade and by the large number of births in the preceding quinquennium, but, thereafter, as the result of a more steady growth of the population, it became more uniform. The birth rate commenced to decline steadily in 1864, and although the effect of this influence was complicated by the arrival of immigrants, its extent is clearly shown in the proportion to the population of children born in the decennium preceding each census and surviving or remaining in the State at the date of the census. These were:—In 1871, 30.32 per cent.; 1881, 28.06 per cent.; 1891, 27.42 per cent.; 1901, 24.04 per cent.; 1911, 22.53 per cent.; 1921, 22.51 per cent.; and in 1933, 18.57 per cent. This decline in the birth rate, accentuated as it was in the years immediately preceding the census of 1933, has culminated in an actual loss of numbers in the age group 0-4 years as shown on page 363. The loss was actually confined to ages under two years, the figure being 12,994, and entirely due to the difference in the number of births in the two years preceding the censuses of 1921 and 1933. The other three single ages in the group show only slight rises, but sufficient to reduce the loss on the whole group to 9,535.

During this period of sixty-two years the proportion of children under 15 years of age to the total population fell from 41.8 per cent. to 28.2 per cent. As a consequence of this development, the proportions both of aged persons (over 65 years of age) and of persons at what may be called

the productive ages (15 to 64 years) increased considerably. However, the combined proportions of persons of dependent age (under 15 and 65 years and over) decreased from 43.92 per cent. in 1871 to 34.21 per cent. in 1933.

The proportion per cent. of adults in the population has grown very considerably throughout the period.

#### CONJUGAL CONDITION OF THE POPULATION.

The proportion of married persons living in New South Wales at the census of 1933 was considerably more than one-third of the population, being 39.58 per cent., which represents an increase from 37.4 per cent. in 1921 and 33.5 per cent. in 1911. The actual numbers and proportions of the population (exclusive of aborigines), arranged in groups according to conjugal condition, at the census of 1933 were as shown in the following table:—

Conjugal condition.	Number.			Proportion per cent.		
	Males.	Females.	Total.	Males.	Females.	Total.
Never married—						
Under age 15 ...	371,745	359,974	731,719	28.29	28.13	28.21
Age 15 and over	386,919	311,619	698,538	29.44	24.36	26.93
Married ... ..	512,886	513,786	1,026,672	39.03	40.16	39.58
Widowed ... ..	37,488	88,171	125,659	2.85	6.89	4.85
Divorced ... ..	5,179	5,895	11,074	0.39	0.45	0.43
Not stated ... ..	4,254	2,931	7,185	...	...	...
Total ... ..	1,318,471	1,282,376	2,600,847	100.00	100.00	100.00

The persons never married constituted 55.14 per cent. of the total population, but of these 731,719 (or 28.21 per cent. of the population) were under the age of 15 years. The number of males over the age of 15 years who had never been married was 386,919, and of females 311,619. The proportion of married to the number of persons over the age of 15 years rose from 49.2 per cent. in 1911 to 55.1 per cent. in 1921, but declined to 54.9 per cent. in 1933.

The following table affords a comparison of the proportions of each of the principal groups to the total population where the necessary particulars were stated at each census from 1861 to 1933:—

Census	Males.				Females.			
	Never married.	Married.	Widowed.	Divorced.	Never married.	Married.	Widowed.	Divorced.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1861	69.34	28.23	2.43	*	61.09	35.14	3.77	*
1871	69.96	27.59	2.45	*	62.89	32.82	4.29	*
1881	70.64	26.94	2.42	*	63.52	31.75	4.73	*
1891	69.78	27.41	2.78	.03	62.87	32.11	5.00	.02
1901	68.46	28.69	2.75	.10	62.43	32.00	5.46	.11
1911	65.00	32.18	2.67	.15	59.30	35.03	5.52	.15
1921	60.51	36.68	2.60	.21	55.70	38.16	5.91	.23
1933	57.73	39.03	2.85	.39	52.49	40.16	6.89	.46

\* Divorce proceedings were first permitted under Matrimonial Causes Act, 1873.

There has been a steady decline since 1881 in the proportions of both sexes never married, and a corresponding increase in the proportions married. This has been due in a large measure to the altered age-constitution of the population consequent on the declining birth-rate. The proportion of widowers has shown no appreciable increase during the period, although the proportion of widows has increased constantly, attaining the high proportion of nearly 7 per cent. of the total female population in 1933. The increase in the proportion of divorced persons of both sexes has been relatively very rapid. The numbers and proportions of widowed and divorced persons shown are exclusive of those who had re-married.

#### BIRTHPLACES OF THE POPULATION.

Broadly speaking, nationality is determined in New South Wales by the common law principle of locality of birth, although it is also provided that, irrespective of place of birth, any child whose father was a British subject, or a child born on a British vessel, shall be deemed a British subject.

The nationality of the population of the State at the census of 1933 was preponderatingly British, no less than 99.3 per cent. of the inhabitants being of British allegiance. The proportion born in Australia was 86.2 per cent.

#### ABORIGINALS.

The number of aboriginals in New South Wales during the first century after the date of settlement is not accurately known, but it is certain that they have never been numerous.

At the censuses of 1871 and 1881 aboriginals living in a wild or semi-wild state were not enumerated. The first careful enumeration was made in 1891, when it was found that only 5,097 aboriginals of full blood were in existence. Since that date the numbers recorded at successive censuses have declined rapidly. The number of aboriginals of full blood enumerated at censuses since 1871 was as follows:—

Year.					Males.	Females.	Total.
1871	...	...	...	...	709	274	983
1881	...	...	...	...	938	705	1,643
1891	...	...	...	...	2,896	2,201	5,097
1901	...	...	...	...	2,192	1,586	3,778
1911	..	...	...	...	1,152	860	2,012
1921	...	...	...	...	923	674	1,597
1933	...	...	...	...	617	417	1,034

Since 1924 the Commonwealth Statistician, through the agency of the Aborigines' Protection Board and the police, has taken an annual census of aboriginals, but owing to the difficulty of tracing individuals, it is not considered that a satisfactory enumeration is obtained by this means, and the figures should be regarded as no more than reliable estimates. The number recorded at the annual collection of 30th June, 1933, was 195

greater than the decennial census enumeration. At 30th June, 1936, the number of aboriginals of full blood recorded in this way was 869, of whom 513 were males and 356 were females. Of the total 67 were nomadic, 362 were in regular employment, and there were 440 others. The number living in supervised camps was 483.

The numbers of half-castes enumerated at successive censuses were as follow:—In 1891, 3,183; in 1901, 3,147; in 1911, 4,512; and in 1921, 4,588, of whom 2,367 were males and 2,221 females. There were 8,309 enumerated at the census of 1933, of whom 4,358 were males, and 3,951 females. The number recorded at the annual collection of 30th June, 1936, was 9,777, of whom 5,234 were males and 4,543 females. However, it is considered probable that this number is considerably overstated through the inclusion of full-bloods, for various reasons, and possibly through the inclusion of quadroons and persons of lesser caste.

Of the half-castes recorded in 1936, 847 were nomadic, 2,612 in regular employment, and there were 6,318 others. The number living in supervised camps was 3,504.

#### POPULATION OF AUSTRALIAN STATES.

The following table shows the population of each State of the Commonwealth at the last two censuses, together with the latest estimate, and the proportion of population in each State. Aboriginals of full blood are excluded from account.

State or Territory.	Population, Census 1921.	Population, Census 1933.	Estimated Population, 31st Dec. 1936.	Proportion in each State or Territory.		
				Census, 1921.	Census, 1933.	31st Dec., 1936.
				per cent.	per cent.	per cent.
New South Wales ...	2,100,371	2,600,847	2,681,736	38·67	39·23	39·40
Victoria ... ..	1,531,280	1,820,261	1,851,862	28·19	27·46	27·21
Queensland ... ..	755,972	947,534	982,134	13·92	14·29	14·43
South Australia ...	495,160	580,949	589,312	9·13	8·76	8·66
Western Australia ...	332,732	438,852	451,557	6·06	6·62	6·63
Tasmania ... ..	213,780	227,599	235,059	3·91	3·43	3·45
Northern Territory ...	3,867	4,850	5,305	0·07	0·07	0·08
Federal Capital Terr....	2,572	8,947	9,787	0·05	0·14	0·14
Commonwealth ...	5,435,734	6,629,839	6,806,752	100·00	100·00	100·00

During the inter-censal period 1921 to 1933, the population of New South Wales increased at an average annual rate of 1·76 per cent., which was faster than that of any other State of the Commonwealth, excepting Western Australia and Queensland, in which States population increased at an average annual rate of 2·10 and 1·85 per cent. respectively. The next highest rate was in Victoria, 1·42 per cent.; South Australia, 1·31 per cent., and Tasmania, 0·51 per cent. The average for the whole of Australia was 1·63 per cent.

## POPULATION OF THE WORLD.

The relationship of the population of New South Wales to that of the rest of the world may be gauged by reference to the following table, derived from the Statistical Year Book of the League of Nations, 1935-36. As therein explained the figures are in some instances mere approximations founded on estimates for which little data exists. Apart from such cases, the populations given are estimates founded on the latest available census figures:—

Region or Country.	Area In Square Miles.	Estimated Population at 31st December, 1934.	Distribution per cent.		Number of Persons per Square Mile.
			Area.	Population.	
Continental Divisions—	000	000	per cent.	per cent.	
Europe§ ... ..	4,411	524,382	8·6	25·2	118·9
Asia§ ... ..	16,182	1,135,755	31·7	54·7	70·2
Africa ... ..	11,556	145,070	22·6	7·0	12·6
North and Central America ...	8,649	176,148	16·9	8·5	20·3
South America ... ..	7,005	85,289	13·7	4·1	12·2
Australasia and Oceania ...	3,301	10,280	6·5	·5	3·1
The World* ... ..	51,104	2,076,924	100·0	100·0	40·6
Countries (including Dependencies)†					
British Empire ... ..	11,330	497,787	22·2	24·0	43·9
China¶ ... ..	4,287	450,000	8·4	21·7	105·0
Russia† ... ..	8,176	170,500	16·0	8·2	20·9
United States ... ..	3,738	142,253	7·3	6·9	38·1
France ... ..	4,537	102,407	8·9	4·9	22·6
Japan ... ..	262	98,136	·5	4·7	374·6
Netherlands ... ..	807	73,089	1·6	3·5	90·6
Germany ** ... ..	182	66,616	·4	3·2	366·0
Italy ... ..	1,045	45,110	2·0	2·2	43·2
Brazil ... ..	3,286	41,660	6·4	2·0	12·7
Other Countries ... ..	13,454	389,366	26·3	18·7	28·9
The World* ... ..	51,104	2,076,924	100·0	100·0	40·6

\* Excluding Arctic and Antarctic Regions. † Excluding Mandated Territories. ‡ Russian Socialist Federal Soviet Republic and associated Republics. § Continental areas only roughly approximate as result of arbitrary distribution of the U.S.S.R. ¶ Including Manchoukuo. \*\* Including the Saar Territory.

## MIGRATION.

A large movement of population takes place each year between New South Wales and other Australian States, but is due more to the movement of tourists, business men, and persons following itinerant callings, than to immigration or emigration of a permanent nature.

Such a qualification might also be applied to the overseas movement but in this case the position varies according to the operation of several factors; the principal of which are the arrival of State assisted migrants and the fact that in times of economic stability the State has always attracted a large number of permanent settlers who have arrived unassisted.

The interstate and overseas movement of people to and from New South Wales is shown in the following table:—

Year.	Arrivals in New South Wales.			Departures from New South Wales.			Excess of Arrivals over Departures.	
	Interstate.	From other Countries Direct.	Total.	Interstate.	To other Countries Direct.	Total.	Interstate	Other Countries Direct.
1921	305,037	57,190	362,227	306,116	50,753	356,869	(-) 1,079	6,437
1922	298,797	53,326	352,123	301,003	37,297	338,300	(-) 2,206	16,029
1923	302,804	48,084	350,888	307,090	35,457	342,547	(-) 4,286	12,627
1924	322,624	55,066	377,690	322,320	38,096	360,416	304	16,970
1925	331,166	55,201	386,367	330,303	40,540	370,843	863	14,661
1926	298,751	62,395	361,146	295,915	41,850	337,765	2,836	20,545
1927	244,853	35,485	310,338	240,262	44,189	284,451	4,591	21,296
1928	231,523	60,786	292,309	228,355	46,614	274,969	3,168	14,172
1929	212,069	52,406	264,475	209,165	46,835	256,000	2,904	5,571
1930	172,390	41,987	214,377	172,587	46,023	218,610	(-) 197	(-) 4,036
1931	132,171	28,637	160,808	134,804	32,494	167,298	(-) 2,633	(-) 3,857
1932	140,866	29,092	169,958	138,700	29,393	168,093	2,166	(-) 301
1933	144,320	30,991	175,311	145,323	30,073	175,396	(-) 1,003	918
1934	150,370	33,738	184,108	149,509	31,776	181,285	861	1,962
1935	143,368	31,959	175,327	142,391	34,602	176,993	977	357
1936	148,479	38,619	187,098	146,496	58,349	184,845	1,987	270

(-) Denotes excess of departures.

\* Including movement of population to and from overseas countries *via* other States.

The figures in the table clearly reveal the influence of economic conditions on population movement. The interstate movement commenced to fall rapidly after 1925, while the overseas arrivals were sustained for a few years longer by the arrival of assisted migrants. From 1927, coincident with a curtailment in the number of assisted migrants (as shown in the table on page 373) the number of unassisted migrants declined also. The overseas departures, however, continued at a high level up to 1930, resulting in an excessive loss of population to overseas countries. This loss continued in 1931 and 1932, but to a diminishing extent. With a recovery in economic conditions over the subsequent years the arrivals, both interstate and overseas, have been slightly exceeding the departures.

It is unlikely that the great decline in the aggregate interstate movement has been due entirely to disturbed economic conditions, as part of the decline is probably attributable to the interstate movement by motor vehicles. Although this traffic is not recorded it has undoubtedly increased

considerably in recent years but, apart from affecting the aggregate movement, it is improbable that the annual net movement is affected to any great degree.

### *Oversea Migration.*

It is possible to analyse the aggregate overseas movement shown in the last table so as to distinguish between persons migrating for permanent settlement, Australians travelling abroad, and visitors from other countries. These statistics as to intention in regard to residence of persons arriving and departing overseas have been collected from the 1st July, 1924. The following summary shows the numbers in the various categories in the years 1933 to 1936, comparing the totals for New South Wales with those for all Australia. The former relate to persons arriving from overseas at New South Wales ports, irrespective of which State is their ultimate destination. Owing to the difficulty of securing accurate records at all coastal points the recorded totals are not the actual numbers, and following upon the census of 1933 an adjustment has been made to the recorded departures up to 1933.

Heading.	1933.		1934.		1935.		1936.	
	New South Wales.	Commonwealth.	New South Wales.	Commonwealth.	New South Wales.	Commonwealth.	New South Wales.	Commonwealth.
Arrivals—								
Permanent New Arrivals ...	5,087	10,749	5,932	11,778	6,245	12,608	6,284	12,653
Australians returning ...	11,352	18,917	11,222	18,875	11,676	20,307	13,099	21,749
Visitors ...	14,552	18,125	16,584	23,051	17,038	22,501	19,236	25,492
Total arrivals	30,991	47,791	33,738	53,704	34,959	55,416	38,619	59,894
Departures*—								
Australian residents departing permanently ...	5,784	12,113	5,396	12,166	5,476	11,357	5,851	11,370
Australians who intend to return ...	10,006	17,849	10,071	18,257	11,102	20,323	12,799	22,050
Visitors ...	14,283	17,616	16,309	21,001	18,024	24,025	19,699	24,977
Total departures	30,073	47,578	31,776	51,424	34,602	55,705	38,349	58,397

\* 1933 adjusted following census of 1933.

The majority of travellers between Australia and other countries embark or disembark at ports in New South Wales (principally Sydney), and this is particularly noticeable in respect of visitors from abroad.

*Nationality of Oversea Migrants.*

The following table shows the nationalities of persons who arrived in or departed from Australia via the ports of New South Wales in 1934, 1935, and 1936.

Nationality.	1934.			1935.			1936.		
	Arri-vals.	Depar-tures.	Excess of Arri-vals.*	Arri-vals.	Depar-tures.	Excess of Arri-vals.*	Arri-vals.	Depar-tures.	Excess of Arri-vals.*
British ... ..	28,927	27,767	1,160	20,784	30,186	(-) 402	32,730	33,351	(-) 571
French ... ..	515	491	24	546	576	(-) 30	574	546	28
German ... ..	194	173	21	175	182	(-) 7	287	228	59
Greek ... ..	154	110	44	165	107	58	272	102	170
Italian... ..	772	316	456	720	260	460	551	268	283
Russian ... ..	41	46	(-) 5	41	49	(-) 8	64	54	10
United States of America ...	735	682	53	1,023	892	131	1,265	1,226	39
Yugoslav ... ..	84	72	12	109	81	28	144	115	29
Other European ... ..	406	383	18	488	510	(-) 22	678	542	136
Total, European ... ..	31,828	30,045	1,783	33,051	32,843	208	36,615	36,432	183
Chinese ... ..	1,224	1,192	32	1,162	1,148	14	1,272	1,274	(-) 2
Indian ... ..	333	232	101	326	251	75	392	281	111
Japanese ... ..	204	182	22	237	203	34	205	210	(-) 14
Syrian ... ..	31	15	16	38	14	24	26	11	15
Other Asiatic ... ..	15	21	(-) 6	27	33	(-) 6	18	21	(-) 3
Polynesian, Melanesian, etc.	87	54	33	108	102	6	61	91	(-) 30
Other Non-European ... ..	16	35	(-) 19	10	7	3	30	20	10
Total, Non-European ... ..	1,910	1,731	179	1,908	1,759	149	2,004	1,917	87
Grand Total ... ..	33,738	31,776	1,962	34,959	34,602	357	38,619	38,349	270

\* (—) Denotes excess of departures.

The numbers in the table lose a certain significance because they include, in addition to the permanent movement, visitors from overseas and Australian residents travelling abroad. Analysed according to intention as to residence expressed at the time of arrival or departure the figures become of more interest. The following table shows the net permanent movement of persons of certain nationalities since 1928; the figures representing the gain or loss between those departing permanently and those who intend to reside for one year or more. The figures for individual nationalities up to 1932 have not been revised so that these totals do not agree with those shown elsewhere.

Nationality.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
British ... ..	+ 9,324	+ 2,821	(-) 5,618	(-) 4,728	(-) 1,761	(-) 846	(-) 211	(-) 51	(-) 407
German... ..	+ 121	+ 21	+ 11	+ 20	+ 20	+ 7	+ 11	+ 11	+ 51
Greek ... ..	+ 242	+ 11	(-) 21	(-) 89	(-) 31	...	+ 51	+ 81	+ 181
Italian ... ..	+ 692	+ 301	+ 134	(-) 156	+ 21	+ 247	+ 541	+ 511	+ 342
Yugoslav ... ..	+ 95	(-) 11	(-) 49	(-) 67	+ 1	+ 27	+ 17	+ 47	+ 56
United States America ...	+ 37	+ 61	(-) 18	(-) 153	(-) 41	(-) 20	+ 21	+ 83	+ 43
Other European ... ..	+ 1,058	+ 141	(-) 43	(-) 265	(-) 111	+ 34	+ 74	+ 26	+ 189
Total European ... ..	+ 11,570	+ 3,368	(-) 5,604	(-) 5,438	(-) 1,904	(-) 565	+ 536	+ 720	+ 455
Chinese ... ..	(-) 81	(-) 273	(-) 323	(-) 303	(-) 182	(-) 220	(-) 37	(-) 15	(-) 32
Natives of India, Ceylon ...	+ 45	+ 21	+ 22	+ 21	+ 9	...	+ 22	+ 20	+ 39
Japanese ... ..	(-) 1	+ 20	(-) 27	(-) 16	(-) 23	+ 30	+ 13	+ 20	(-) 43
Syrian ... ..	+ 70	+ 14	(-) 1	...	+ 3	+ 17	+ 17	+ 22	+ 14
Other Asiatic ... ..	+ 18	(-) 3	...	+ 1	(-) 7	(-) 10	(-) 7	+ 1	(-) 2
Other Non-European ... ..	+ 11	(-) 1	+ 4	(-) 4	(-) 5	...	(-) 8	+ 1	+ 2
Total Non-European ... ..	+ 62	(-) 222	(-) 325	(-) 301	(-) 205	(-) 183	...	+ 49	(-) 22
Grand Total ... ..	+ 11,632	+ 3,146	(-) 5,929	(-) 5,739	(-) 2,109	(-) 748	+ 536	+ 769	+ 433

The salient features of this table are the permanent loss of people of British nationality after 1929 and the gain throughout the whole period of Southern Europeans, notably Italians, Greeks and Yugoslavs. The high net gain of "Other Europeans" in 1928 also includes a large number of Czech-Slovakians.

The Italian movement for each year after 1928 comprises a greater number of females than males; the differences between the sexes being considerable for 1931 onwards. A similar but not so noticeable trend exists in the movement of Greeks and Yugoslavs.

#### *Immigration Restriction.*

At Common Law aliens have no legal right of admission to any British country, and migration to and from New South Wales is regulated principally by statutes of the Federal Parliament, *e.g.*, the Immigration Act, 1901-33, and the Contract Immigrants Act, 1905.

Any person may be refused admission to Australia who fails to write from dictation by an officer not less than fifty words in any prescribed European language; or any person who has not the prescribed certificate of health; any feeble-minded person; any person suffering from serious transmissible disease or defect, tuberculosis or certain other serious diseases; any person convicted of crime in certain circumstances; any prostitute or person living by prostitution; any advocate of revolution, assassination, or the unlawful destruction of property; any Turk of Ottoman race; or any person 16 years of age or over not possessed of a passport as prescribed. Should such persons gain admission, they may be deported. Usually persons formerly domiciled in the State cannot be excluded from return after temporary absence. For a period of five years from 2nd December, 1920, persons of German, Austro-German, Bulgarian or Hungarian parentage and nationality were excluded, but upon the expiration of that period no further restrictions were imposed. Ex-enemy subjects repatriated during the late war are required to obtain approval of their readmission.

#### *Contract Migrants.*

The admission of migrants under contract to perform manual labour is regulated by the Contract Immigrants Act, 1905. Such contracts must be made by or on behalf of an Australian resident on the one part. In every case they are subject to Ministerial approval which may be withheld if the fulfilment of the contract is likely to prejudice the public welfare as affecting an industrial dispute or the conditions or standards prevailing in local industry. Except in the cases of contract migrants who are British subjects born in the United Kingdom or descended from a British subject there born, it must be shown that there is difficulty in obtaining workers of equal skill and ability within the Commonwealth. The Act, however, does not apply to domestic servants, nor to personal attendants accompanying their employers.

#### *Assisted Migration.*

Particulars of the history of assisted migration will be found in earlier issues of the Year Book.

The last scheme was the Joint Commonwealth and States Scheme to which the British Government became committed by a series of agreements, the final one of which became popularly known as "The £34,000,000 Agreement." The original agreement between the Commonwealth and the States operated from 1st March, 1921. Development and migration under this scheme was interfered with by world-wide economic depression and in December, 1930, all assisted immigration activities thereunder were suspended; but in March, 1931, approval was granted for the acceptance

of wives and children under the age of 14 years of men in regular employment in New South Wales. Further commitments of the Government of Great Britain under the agreement were cancelled as from 1st May, 1932.

With an improvement in economic conditions the Commonwealth Government, in June, 1937, announced that it was prepared to co-operate with any State wishing to resume assisted immigration.

Details of auxiliary organisations under whose care juvenile migrants are introduced are shown on later pages.

#### *Numbers of Assisted Migrants.*

The following table shows particulars of the manner of choosing and the age and sex of assisted migrants who arrived in New South Wales under post-war schemes. A small number in 1919-21 came under the revived State scheme; there were 10,972 between 1919 and 1925 who were assisted under the Imperial Ex-Service Settlement Scheme and the remainder came under the Joint Commonwealth and States Scheme.

Year	Selected.	Nominated.	Adults and Children over 12 years of age.		Children under 12 years of age.		Grand Total.
			M.	F.	M.	F.	
1st July 1919 to 31st Dec. 1925	6,623	28,762	14,579	12,698	4,191	3,917	35,385
1926 ... ..	1,572	11,257	5,082	4,539	1,633	1,575	12,829
1927 ... ..	1,542	8,718	3,593	4,174	1,268	1,225	10,260
1928 ... ..	1,628	7,104	3,190	3,726	940	876	8,732
1929 ... ..	1,008	4,418	2,004	2,342	563	517	5,426
1930 ... ..	169	1,005	357	588	106	123	1,174
1931 ... ..	7	67	12	38	13	11	74
1932 ... ..	...	21	1	7	8	5	21
1933 ... ..	...	11	1	6	2	2	11
1934 ... ..	...	11	...	5	4	2	11
1935 ... ..	...	1	...	1	...	...	1
1936 ... ..	...	4	...	1	2	1	4

The following statement shows the migration to the State since 1832, and the total number of assisted migrants who arrived in New South Wales under various schemes, inclusive of Victoria and Queensland before their separation. After 1905 the number of migrants nominated by residents of the State and the number selected abroad are shown separately.

Period.	Migrants assisted.				
	Nominated.	Selected.	Total Arrivals.		
			Males.	Females.	Total.
1832-1905 § ...	...	...	104,106	107,866	211,972.
1905-1909 § ...	6,144	2,713	*	*	8,857
1909-1914 § ...	32,406	12,444	23,816	21,034	44,850
1914-1919 § ...	4,123	1,322	2,067	3,378	5,445
1919-1924** ...	22,214	4,384	13,927	12,671	26,598
1925-1929 ...	38,045	7,989	23,115	22,919	46,034
1930 ...	1,005	169	463	711	1,174
1931 ...	67	7	25	49	74
1932 ...	21	...	9	12	21
1933 ...	11	...	3	8	11
1934 ...	11	...	4	7	11
1935 ...	1	...	...	1	1
1936 ...	4	...	2	2	4
1832-1936 ...	104,052†	29,028‡	167,537†	168,658†	345,052

\* Information not available.  
‡ To 30th June.

† Excluding migrants, 1905-1909.  
\*\* 5½ years ended 31st December, 1924.

‡ 1905 to 1935.

In October, 1927, the State Government decided to restrict nominations to such classes as were not likely to disturb the labour market, and this system was applied more vigorously as the industrial situation became more acute, until December, 1930, when it was decided that all assisted migration should cease, but since March, 1931, assisted migration of wives and children (under 14 years) of persons in permanent employment in New South Wales has been allowed. The nominated migrants who arrived in the years 1932 to 1936 were wives and children of persons in the State.

*Country of Origin of Assisted Migrants.*

Nearly all the assisted migrants in the post-war schemes have come from the United Kingdom; the relatively small number from other countries is shown in the following statement:—

Year ended 31st Dec.	Assisted Migrants from—						Total Assisted Migrants.		
	United Kingdom		Other British Possessions.		Foreign Countries.				
	Nomin- ated	Selected	Nomin- ated.	selected.	Nomin- ated.	Selected	Nomin- ated.	Selected.	Total.
1st July 1919 to 31st Dec. 1925	28,412	6,623	142	...	208	...	28,762	6,623	35,385
1926 ... ..	11,089	1,572	148	...	20	...	11,257	1,572	12,829
1927 ... ..	8,533	1,542	183	...	2	...	8,718	1,542	10,260
1928 ... ..	6,088	1,628	116	...	...	...	7,104	1,628	8,732
1929 ... ..	4,384	1,008	34	...	...	...	4,418	1,008	5,426
1930 ... ..	975	169	29	...	1	...	1,005	169	1,174
1931 ... ..	59	7	8	...	...	...	67	7	74
1932 ... ..	21	...	...	...	...	...	21	...	21
1933 ... ..	11	...	...	...	...	...	11	...	11
1934 ... ..	11	...	...	...	...	...	11	...	11
1935 ... ..	1	...	...	...	...	...	1	...	1
1936 ... ..	4	...	...	...	...	...	4	...	4

*Juvenile Migrants.*

A number of auxiliary migration organisations have operated in conjunction with the Government schemes for assisting migrants. Their activities are confined mainly to nominating juvenile migrants and caring for their training and welfare upon arrival. Dr. Barnardo Homes brought out parties of juveniles without government assistance during the period of suspension, and a Fairbridge Farm School is now being established in New South Wales. Other organisations of a similar nature, the detailed operations of which have been published in the earlier issues of the Year Book, are the Dreadnought Fund Trust, the Salvation Army, Y.M.C.A. (in conjunction with the churches), the Catholic Immigration League, the Church of England Council of Empire Settlement, and the Big Brother Movement. The activities of these organisations were suspended in December, 1930, and only five girl domestics arrived in 1931.

*The Dr. Barnardo Homes.*

This organisation in New South Wales is a branch of the English institution of that name, which arranges passages and pays passage money to Australia of boys and girls trained in the organisation's homes and on

farms in England. On arrival the boys are sent for training to the Barnardo Farm School, "Mowbray Park," Pieton, which comprises 172 acres of land. The girls are trained at the Barnardo Girls' Training Home, Ashfield. The local organisation places the boys with farmers, where the home conditions are found to be satisfactory. The after-care section of the organisation keeps constantly in touch with the young people and banks five shillings per week of their wages till they reach the age of 21 years, when they receive their savings, plus interest.

The New South Wales branch is the only one operating. The first boys were landed in Sydney in October, 1921, and the first girls in May, 1923. Up to December, 1930, when Government assistance was suspended, 683 Barnardo boys and 404 girls were brought out under the joint Commonwealth and State immigration scheme. Since then four parties, comprising in all 129 boys and a further three parties comprising 80 girls, have been brought out by the organisation without Government assistance.

#### *Fairbridge Farm Schools.*

A property known as "Narragoon," comprising 1,428 acres freehold, and situated about four miles from Molong, has been purchased with the object of founding a Fairbridge Farm School in New South Wales. This is the third farm to be established under the Fairbridge scheme, the others being at Pinjarra, in Western Australia, and at Vancouver Island, Canada. The establishment of the farm in this State was sponsored by the Rhodes Fellowship of New South Wales, and the proposal was adopted by the parent body. The British Government has agreed to contribute five shillings per week for each child and the Commonwealth and New South Wales Governments 3s. 6d. per week each. A further 5s. per week per child will be met by the movement. The British Government also offered £15,000 towards establishment costs if a similar amount is raised in Australia.

#### *British Settlers' Welfare Committee.*

Among the auxiliary migration organisations, some confine their attention to reception, welfare and after-care. The most important is the British Settlers' Welfare Committee.

It was formed to undertake the obligations entered into with the British Government as to the after-care of migrants, and works in close co-operation with the State Government to this end.

Its officers, with the aid of committees in important centres, keep in touch with all lads and other migrants.

Other organisations which engage in reception, welfare and after-care are the Travellers' Aid Society and the Returned Soldiers and Sailors' Imperial League. The latter assists in after-care of Imperial ex-service migrants.

#### *Passage Money for Assisted Migrants.*

Prior to the war several steamship companies conveyed migrants from the United Kingdom at very low rates, the State Governments contributing a portion. Since the war the cost per berth has increased, and since 1st May, 1925, under the Imperial scheme, contributions have been made in

equal proportions by the Federal and Imperial Governments towards the cost of assisted passages for approved persons from the United Kingdom. Contributions are on the following scale:—

	Government Subsidy.	Payment by Migrant.
	£ s. d.	£ s. d.
Children over 3 and under 12 years ..	16 10 0	Nil.
Juveniles over 12 and under 17 years ..	27 10 0	5 10 0
Juveniles over 17 and under 19 years ..	22 0 0	11 0 0
Domestics .. .. .	33 0 0	Nil.
Married couples, including husbands and wives, widows and widowers (if accompanied by one or more children under 19 years) each ..	22 0 0	11 0 0
Other approved migrants .. ..	16 10 0	16 10 0

In the case of persons nominated for assisted passages by relatives or friends in the State, nominators are required to guarantee that adequate provision will be made for their maintenance.

#### NATURALISATION.

Under certain conditions a person of foreign allegiance may be granted a certificate of naturalisation, which entitles him to all the political and other rights, powers, and privileges, and subjects him to all obligations to which natural-born British subjects are entitled, or subject in the Commonwealth of Australia, except insofar as special distinction is made by law between the prerogatives of natural born and naturalised British subjects. The issue of these certificates is a function of the Commonwealth.

The privileges of naturalisation have not been widely sought in New South Wales on account of the smallness of the non-British element in the population. There were 442 persons naturalised during 1936. The total number of persons naturalised since 1849 was 23,266, of whom 6,989 were of German origin; 1,872 were Swedes; 1,320 Danes; 2,595 Italians; and 943 French. The number classified as Russians was 1,482, and (since 1922) 228 as Poles, 126 as Finns, and 218 as natives of Esthonia, Latvia or Lithuania. The number of Asiatics was 1,349, of whom 920 were Chinese and 392 Syrians. More than 27 per cent. of the persons naturalised obtained their certificates since 1919. The principal nationality affected was that of Greeks, of whom 1,221 changed during the last seventeen years as against 428 previously. Corresponding figures for others were Italians 1,700 and 895; Germans, 603 and 6,386; Syrians, 249 and 143; Swedes, 206 and 1,666; Danes, 204 and 1,116; and Russians, 412 and 1,070. Only 12 Chinese have been naturalised in New South Wales since the passage of the Chinese Restriction and Regulation Act of 1888. Certificates of Naturalisation issued under former State laws remain in force under the present Federal statute, the Nationality Act, 1920-30.

#### PASSPORTS.

Under the Passports Act, 1920 (Federal), no person who is or appears to be more than 16 years of age may embark at any place in the Commonwealth for a journey to any place beyond the Commonwealth unless he is the holder of a valid passport or other document authorising his departure.

Statutory exemptions extend to members of the naval or military forces of any British Dominion on duty; members of the crews of vessels and persons signing on the articles of a vessel for a voyage overseas; seafaring

men who were members of the crew of an arriving vessel and who are being repatriated to the United Kingdom as passengers; members of the crews of any aircraft operating on a regular service between the Commonwealth and an overseas destination; British subjects by birth travelling to Papua, Norfolk Island and New Zealand, and aboriginal natives of Asia or any island in the East Indies or in the Indian or Pacific Oceans.

Travellers to the Mandated Territory of New Guinea must have passports specially endorsed for travel to the Territory or, in lieu, Permits to enter the Territory.

The fee for a Commonwealth passport is £1, and it is valid for a period of five years. It may be renewed for a further period of five years, but it cannot be extended beyond ten years from the original date of issue. A fee of 2s. is charged for each year of renewal desired.

British visas are added to the passports of aliens, the fees being 8s. for an ordinary visa and 2s. for a transit visa.

British subjects travelling to foreign countries must have their passports endorsed for travel to those countries and bearing where required the visa of the respective Consular representatives. The necessity for Consular visas has been dispensed with in respect of travel to many foreign countries, principally in Europe.

Under the provisions of the Immigration Act, 1901-1935, all persons over 16 years of age who desire to enter Australia must be in possession of a passport or landing permit.

## VITAL STATISTICS.

### REGISTRATION OF BIRTHS, DEATHS, AND MARRIAGES.

CIVIL registration of births, deaths, and marriages was inaugurated in New South Wales in March, 1856, when a general registry was established, and a Registrar-General appointed by the Governor. The laws relating to registration were consolidated by the Registration of Births, Deaths, and Marriages Act, 1899, amended in 1930 and 1934, and those relating to marriage by the Marriage Act, 1899, amended by the Marriage (Amendment) Acts, 1924, 1925, and 1934. For registration purposes New South Wales is divided into 125 registry districts and in each district there is at least one registry office in the charge of a district registrar or an assistant district registrar. On 1st January, 1937, there were 212 registry offices.

The births of all children born alive are required to be registered within sixty days of the birth. After the expiration of sixty days a birth cannot be registered unless some person present at the birth or the parent makes a statutory declaration within six months of the birth. Prior to 1st April, 1935, no birth could be registered after the expiration of six months, but the amending Act, which came into operation on that date, provides for such registrations upon proper authority being obtained. A child is considered to have been born alive if it has breathed and has been wholly born into the world whether it has had an independent circulation or not. As a general rule, births have been registered promptly in order to obtain the benefit of the maternity allowances.

The registration of stillbirths became operative on 1st April, 1935, and the Act requires that registrations shall be made within 21 days. For purposes of registration a stillborn child is one of seven months gestation or over not born alive, and includes any child not born alive which measures at least fourteen inches, but does not include any child which has actually breathed.

Before interment or cremation, notice of the death of any person must be supplied to the District Registrar by a relation of the deceased, or by the householder or tenant of the house or place in which the death occurs. Such notice must be accompanied by a proper certificate as to the cause of death. When a dead body is found, the death is registered by the coroner or by the nearest Justice of the Peace.

Marriages may be celebrated only by a minister of religion registered for that purpose by the Registrar-General, or by the District Registrar of the district in which the intended wife ordinarily resides. In the latter case the parties to be married must sign, before the District Registrar, a declaration that they desire to be married, and affirming the usual place of residence of the intended wife. Marriage of minors is permissible only with the written consent required by law. Marriage with a deceased wife's sister or a deceased brother's widow is valid in law in New South Wales.

At the beginning of 1937 there were 2,296 persons registered as ministers of religion for the celebration of marriages in New South Wales. The distribution amongst the various denominations is shown below, viz.: 614 belonged to the Church of England, 681 were Roman Catholics, 317 Methodist, 282 Presbyterian, 82 Congregational, 93 Baptist, 59 belonged to the Salvation Army, 45 were Seventh Day Adventists, 31 belonged to the Church of Christ, 11 to the Latter Day Saints, and 8 to the Jewish faith. There were 32 other religious bodies, represented by 73 ministers.

## MARRIAGES.

The following table shows the average annual number of marriages and the rates per 1,000 of the population since 1880:—

Period.	Average Annual Number of Marriages.	Rate per 1,000 of Population.	Period.	Average Annual Number of Marriages.	Rate per 1,000 of Population.
1880-84	6,738	8.39	1920-24	18,374	8.52
1885-89	7,679	7.67	1925-29	19,481	8.11
1890-94	7,954	6.80	1930-34	17,746	6.88
1895-99	8,700	6.74	1932	17,362	6.73
1900-04	10,240	7.37	1933	18,399	7.07
1905-09	12,080	7.97	1934	20,210	7.70
1910-14	15,978	9.17	1935	22,361	8.45
1915-19	15,345	7.96	1936	22,873	8.57

A review of the marriage rates since 1880 shows that the rates declined steadily for ten years prior to 1894, when the rate was only 6.25 per 1,000 of population. After that year an improvement, remarkable for its regularity, was experienced, until in 1912 the rate (9.56 per 1,000) was the highest then recorded. In 1915 the rate was slightly higher, probably due in part to marriages contracted by soldiers prior to their departure for the war. Owing to the absence of many marriageable men the rates for the next three years showed a decline, but coincident with the return of men from active service the rate rose appreciably in 1919 and still more in 1920. The movement of the subsequent years shows a sharp decline followed by a recovery, then another decline. The average for the five years 1925-29, though appreciably less than in the quinquennia immediately before and after the war, was greater than for any other similar period since 1880. The rate in 1930 was 15 per cent., lower than this average, and a further decline in 1931 brought it below the lowest level of any preceding year. In the last five years the rate has shown a steady upward movement.

The following statement shows the marriage rate per 1,000 of the population in each State, the Commonwealth of Australia, and in New Zealand in 1936, compared with the rates of the previous five years:—

State.	1931.	1932	1933.	1934.	1935.	1936.
<i>New South Wales...</i>	6.02	6.73	7.07	7.70	8.45	8.57
<i>Victoria ...</i>	5.66	6.49	6.96	7.57	8.38	8.61
<i>Queensland ...</i>	6.43	6.86	6.84	7.09	8.57	8.49
<i>South Australia ...</i>	5.33	6.20	6.84	7.39	8.28	8.82
<i>Western Australia</i>	6.34	6.67	7.69	8.34	8.85	9.43
<i>Tasmania ..</i>	6.68	6.64	7.13	7.32	8.16	8.98
<i>Commonwealth ..</i>	5.96	6.63	7.03	7.71	8.45	8.66
<i>New Zealand ...</i>	6.79	6.80	7.16	7.62	8.20	9.25

*Conjugal Condition before Marriage.*

During the year 1936 of the males married, 21,148 were bachelors, 1,116 were widowers, and 609 were divorced. Of the females, 21,434 were spinsters, 778 were widows, and 661 were divorced. The proportion of males remarried was 7.54 per cent., and of females 6.29 per cent.

The following table shows particulars relating to first marriages and re-marriages in quinquennial periods since 1890.

Periods.	Males who were—			Females who were—			Rates per 10,000 Married.					
	Bachelors.	Widowers.	Divorced.	Spinsters.	Widows.	Divorced.	Bridegrooms.			Brides.		
							Bachelors.	Widowers.	Divorced.	Spinsters.	Widows.	Divorced.
1890-94	36,610	3,063	97	36,565	3,040	165	9,205	770	25	9,194	764	42
1895-99	39,982	3,246	273	40,081	3,036	434	9,191	746	63	9,202	698	100
1900-04	47,243	3,657	301	47,593	3,122	486	9,227	714	59	9,295	610	95
1905-09	56,322	3,708	370	56,762	3,129	509	9,325	614	61	9,398	618	84
1910-14	75,155	4,193	541	75,227	3,840	816	9,407	525	68	9,416	482	102
1915-19	71,602	4,461	764	71,559	4,285	933	9,319	581	100	9,326	552	122
1920-24	84,834	5,571	1,463	84,723	5,428	1,717	9,234	607	159	9,222	591	187
1925-29	89,794	5,555	2,055	90,622	4,394	2,388	9,219	570	211	9,304	451	245
1930-34	81,899	4,771	2,061	83,203	3,244	2,284	9,230	538	232	9,377	366	257
1932	16,050	950	362	16,340	604	418	9,244	547	209	9,411	348	241
1933	17,043	905	451	17,294	648	457	9,268	492	245	9,399	352	249
1934	18,710	1,022	478	19,001	666	543	9,258	506	236	9,402	329	269
1935	20,709	1,073	579	21,068	644	649	9,261	480	259	9,422	288	290
1936	21,148	1,116	609	21,434	778	661	9,246	488	266	9,371	340	289

Since 1898 the proportion of re-marriages has usually been greater among men than women. During this period the proportion of widowers re-married has always been greater than that of widows except for the three years 1920-22, when the variation was probably due to the re-marriage of war widows. The remarkable divergence since 1925 is probably partly due to the operation of the provisions of the Widows Pensions Act of 1925.

Since 1893 the proportion of re-marriages of divorced women has always exceeded that of divorced men.

In 1915 the proportion of re-marriages reached its lowest point among both bridegrooms and brides, but has since increased, mainly due to the re-marriage of divorced persons. The increase among brides was not as great as among bridegrooms, the increase in the divorced women among the former being offset by a decrease in the proportion of widows.

### Age at Marriage.

The number of brides and bridegrooms in age groups in each of the last five years is shown in the following table. The ages recorded are those stated at marriage by the contracting parties, without verification, and they represent age last birthday.

Year.	Ages of Bridegrooms.				Ages of Brides.			
	Under 21 years.	21 to 29 years.	30 to 44 years.	45 and over.	Under 21 years.	21 to 29 years.	30 to 44 years.	45 and over.
1932	1,404	10,912	4,034	1,012	4,862	9,799	2,194	507
1933	1,333	11,677	4,357	1,032	4,890	10,713	2,303	493
1934	1,290	12,885	4,924	1,111	4,926	11,964	2,745	575
1935	1,251	14,499	5,350	1,261	5,266	13,518	2,932	645
1936	B. 1,311	14,712	4,620	505	S. 5,266	13,670	2,276	222
	W. 1	80	375	660	W. ...	77	337	364
	D. ...	68	372	169	D. ...	185	395	81

B, bachelors; S, spinsters; W, widowed; D, divorced.

Further details of the ages and condition of persons married each year are published in the Statistical Register of New South Wales.

In 1936 approximately 76 per cent. of first marriages among men and 88 per cent. among women were celebrated before attaining age 30, and the majority of marriages of persons over 45 years of age were re-marriages of one or both of the contracting parties, the proportion of such marriages being 62 per cent. among men and 67 per cent. among women.

The following statement shows the average age at marriage both of bridegrooms and of brides in various years since 1905. The difference between the ages at marriage of males and females is on the average about  $3\frac{1}{2}$  years, the males being the older.

Year.	Average Age of—		Average Age of—		Year.	Average Age of—		Average Age of—	
	All Bridegrooms.	Bachelors.	All Brides.	Spinsters.		All Bridegrooms.	Bachelors.	All Brides.	Spinsters.
1905	years. 29·1	years. 28·2	years. 25·0	years. 24·4	1931	years. 28·7	years. 27·3	years. 25·1	years. 24·1
1910	29·0	28·2	25·3	24·7	1932	28·7	27·3	25·1	24·1
1915	28·7	28·0	25·5	25·0	1933	28·8	27·5	25·1	24·2
1920	29·5	28·5	26·1	25·2	1934	28·9	27·6	25·4	24·4
1925	29·4	28·0	25·8	24·8	1935	28·9	27·6	25·4	24·5
1930	29·0	27·6	25·3	24·2	1936	28·9	27·6	25·5	24·5

The average age at marriage show little variation from year to year, but the incidence of marriages delayed by economic depression is evident since 1933.

#### *Marriages of Minors.*

The number of minors married at each individual age is shown annually in the Statistical Register. The number of brides at each age under 21 in 1936, was 1 at 13, 9 at 14, 67 at 15, 257 at 16, 652 at 17, 1,160 at 18, 1,509 at 19, 1,611 at 20. The corresponding numbers of bridegrooms were 2 at 15, 8 at 16, 57 at 17, 170 at 18, 427 at 19, and 648 at 20.

The following are the numbers and proportions of brides and bridegrooms married under the age of 21 years:—

Period.	Minors.		Proportion to Total Marriages.		Period.	Minors.		Proportion to Total Marriages.	
	Bridegrooms.	Brides.	Bridegrooms.	Brides.		Bridegrooms.	Brides.	Bridegrooms.	Brides.
			per cent.	per cent.				per cent.	per cent.
1875-79...	683	7,278	2·74	29·19	1920-24...	4,712	19,982	5·13	21·75
1880-84...	827	9,203	2·45	27·32	1925-29...	7,000	25,508	7·19	26·19
1885-89...	939	9,623	2·45	25·06	1930-34...	6,830	24,429	7·70	27·53
1890-94...	847	9,803	2·13	24·65	1931 ...	1,402	4,698	9·12	30·55
1895-99...	1,197	10,475	2·75	24·08	1932 ...	1,404	4,862	8·09	28·00
1900-04...	1,669	11,970	3·26	23·38	1933 ...	1,333	4,890	7·24	26·58
1905-09...	2,609	14,378	4·32	23·80	1934 ...	1,290	4,926	6·38	24·37
1910-14...	3,579	17,821	4·48	22·31	1935 ...	1,251	5,266	5·59	23·55
1915-19...	3,188	15,718	4·15	20·49	1936 ...	1,312	5,266	5·74	23·02

The proportion of minors among bridegrooms reached the lowest recorded figure, 1.89 per cent., in 1890. Since then, except for the war years, there was a sustained though fluctuating increase up to 1931, when the proportion was 9.12 per cent. Subsequent years show a continuous decline.

Among brides the proportion of minors has always been much larger than among bridegrooms, but has decreased continuously, with irregular fluctuations until the low level of 20.79 per cent. was reached in 1921. The proportion then increased rapidly to 30.55 per cent. in 1931, when it was at its highest level since 1875. Since 1931 the proportion of female minors has decreased to the same extent as male minors.

#### *Mark Signatures in Marriage Registers.*

In 1870 the proportion of signatures made in the marriage register with marks was as high as 188.8 per 1,000, but the number of persons who signed in this way was only 56 in 1936, equal to 2.4 per 1,000 persons married in the year.

#### *Marriages according to Denomination.*

Of the marriages performed in New South Wales in 1936, 20,997, equivalent to 91.80 per cent. of the total, were celebrated by ministers of religion licensed under the authority of the Registrar-General. The number contracted before district registrars was 1,876, being 8.20 per cent. of the total.

The following table gives the number and proportion per cent. of marriages registered by the several denominations during 1936 in comparison with the previous ten years:—

Denomination.	1920-35.		1936.	
	Marriages.	Proportion per cent.	Marriages.	Proportion per cent.
Church of England... ..	78,118	41.12	9,451	41.32
Roman Catholic ... ..	39,861	20.98	4,804	21.00
Presbyterian ... ..	24,151	12.71	2,694	11.78
Methodist ... ..	21,412	11.27	2,577	11.27
Congregational ... ..	4,227	2.23	452	1.98
Baptist ... ..	3,119	1.64	386	1.69
Church of Christ ... ..	954	.50	136	.59
Salvation Army ... ..	883	.47	118	.51
Hebrew ... ..	503	.26	49	.21
All Other Sects ... ..	2,267	1.20	330	1.45
Registrars' Offices ... ..	14,479	7.62	1,876	8.20
Total Marriages ... ..	189,974	100.00	22,873	100.00

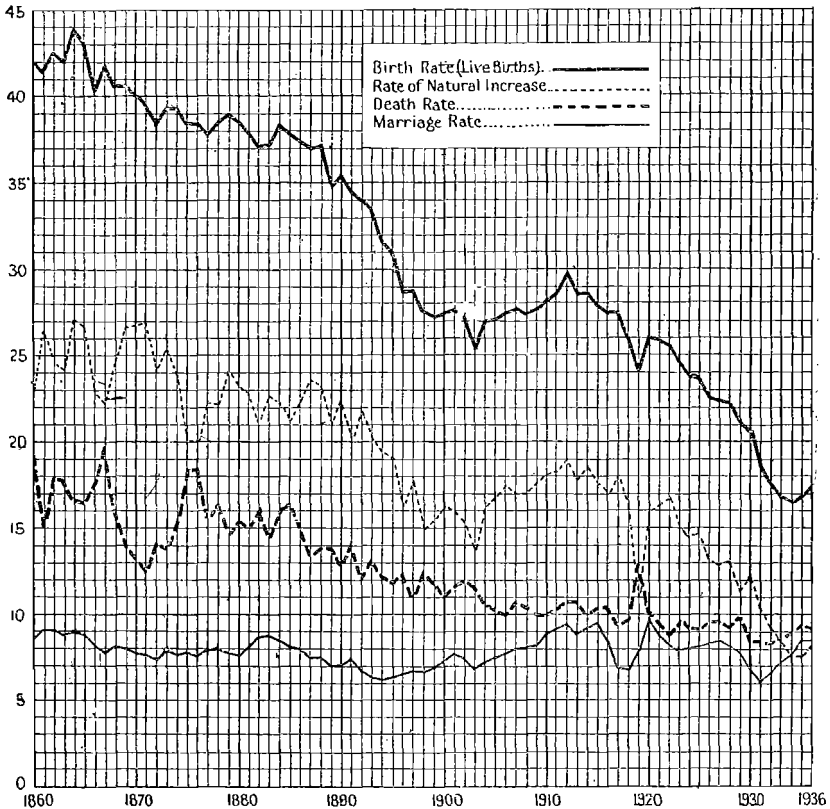
#### *Divorces.*

The number of marriages dissolved annually by divorce and decree of nullity has increased materially during recent years, and they are now of considerable magnitude in relation to the number of marriages celebrated

annually. Particulars of the duration of such marriages and number of issue are shown in the chapter, "Law Courts," of this Year Book.

The number of marriages dissolved in New South Wales by decrees of divorce made absolute or by declarations of nullity in 1936 was 1,160, being in the proportion of 5.1 per cent. to the number of marriages celebrated during the year.

#### RATES OF BIRTHS, DEATHS, MARRIAGES, AND OF NATURAL INCREASE, 1860-1936.



The numbers at the side of the Graph represent rates per 1,000 of mean population.

#### LIVE BIRTHS.

The birthrate showed a steady downward tendency from 1864 to 1888. It fell sharply from 1888 until 1903, but there was then an improvement until 1912. During the war years (1914-1919) coincident with the decline in the marriage rate, there was a very rapid falling-off in the birth-rate, with a recovery to normal in 1920. After 1920, despite a temporary revival in the marriage rate until 1927, the birth rate was at a record low figure in each successive year until 1934. In 1935 and 1936 the birth rate increased slightly, evidently as a consequence of the rapidly increasing marriage rate since 1931.

The following table shows the average annual number of live births and the birth-rate per 1,000 of the total population since 1880:—

Period.	Average Annual Number of Live Births.	Birth-rate per 1,000 of Population.	Period.	Average Annual Number of Live Births.	Birth-rate per 1,000 of Population.
1880-84	30,417	37·89	1920-24	54,321	25·20
1885-89	36,877	36·85	1925-29	53,814	22·40
1890-94	39,550	33·80	1930-34	46,459	18·02
1895-99	37,042	28·68	1932	44,905	17·41
1900-04	37,498	26·99	1933	44,195	16·98
1905-09	41,788	27·56	1934	43,335	16·52
1910-14	50,190	28·79	1935	44,676	16·89
1915-19	51,331	26·64	1936	46,193	17·31

The rates shown above are calculated by the usual "crude" method of relating the births to the total population, which is not altogether satisfactory. A preferable method for purposes of strict analysis is to relate the number of mothers at various ages giving birth to children to the total number of women at corresponding ages, or to relate the annual number of births to the number of women of child-bearing ages living during the year. Unfortunately these methods can be followed with exactitude only at census dates, since at any other time it is very difficult to make a reliable estimate of the number living at various ages, on account of migration and other influences.

The birth-rate per 1,000 women living at various groups of reproductive ages, from 15 to 45 years, have been calculated for the census years up to 1933, and are shown in the following table:—

Age Groups (years).	1891.	1901.	1911.	1921.	1933.	Decrease per cent. in rates 1891 to 1933.
15-19	35·30	30·87	33·75	32·72	29·73	15·8
20-24	170·90	134·65	141·45	146·57	106·05	37·9
25-29	247·48	177·95	187·35	169·99	119·68	51·6
30-34	238·81	168·42	161·20	140·18	94·39	60·5
35-39	196·15	136·60	122·27	101·71	59·23	69·8
40-44	96·61	70·79	54·51	43·78	24·04	75·1
15-44	161·74	117·46	118·50	109·84	72·57	55·1

From the foregoing table it will be seen that there has been a decline of 55·1 per cent. in the birthrate since 1891 and that the decline has been general in all age-groups. It was more marked at the later than at the earlier ages, and became increasingly pronounced as age advanced.

The contrast in experience in regard to the first and last quinquennia of the normal years of child-bearing is particularly striking. Whereas the birth-rate for women in the last quinquennium of child bearing years in 1891 was 174 per cent. greater than the rate for those in the first quinquennium of child bearing years, the corresponding proportion in 1921 was only 34 per cent. greater, and in 1933 it was 19 per cent. lower. The rate in age-group 20-24 showed a persistent improvement from 1901 to 1921, but in 1933 dropped to the lowest level yet recorded.

An outstanding feature of the comparison is the rapidity with which the downward trend of the birthrate gathered momentum during the last intercensal period, so that the relative decline during this period of twelve years—1921 to 1933—was greater than the decline during the previous thirty years—1891 to 1921. This was most marked in the group 20 to 24 years, the fall being 27.6 per cent. between 1921 and 1933 and 14.2 per cent. between 1891 and 1921. The relative decline in each group is shown below:—

Age Group.						Decrease per cent. in Birth Rates.	
						1891 to 1921.	1921 to 1933.
Years.							
15-19 ...	...	...	...	...	...	7.3	9.9
20-24 ...	...	...	...	...	...	14.2	27.6
25-29 ...	...	...	...	...	...	31.3	29.6
30-34 ...	...	...	...	...	...	41.3	32.7
35-39 ...	...	...	...	...	...	48.1	41.8
40-44 ...	...	...	...	...	...	54.7	45.1
15-44 ...	...	...	...	...	...	32.1	33.9

The crude birth-rate for New South Wales was 34.5 per cent. lower in 1933 than in 1921. The rate, calculated on the basis of the number of women of reproductive age, was 33.9 per cent. lower.

The crude birth-rates per 1,000 of the population of each State, of the Commonwealth and of New Zealand in the last six years are given in the following table:—

State.	1931.	1932.	1933.	1934.	1935.	1936.
<i>New South Wales</i> ...	18.67	17.41	16.99	16.52	16.89	17.31
Victoria ...	16.86	15.19	15.60	15.20	15.16	15.63
Queensland ...	19.28	18.56	18.14	18.17	18.31	19.17
South Australia ...	15.77	14.74	15.32	14.50	14.14	15.17
Western Australia ...	19.77	18.31	17.95	17.66	18.23	18.84
Tasmania ...	21.18	19.78	19.93	19.51	19.41	19.84
Commonwealth ...	18.16	16.86	16.78	16.39	16.55	17.13
New Zealand ...	18.42	17.09	16.59	16.47	16.13	16.64

*Birth-Rates—Metropolis and Remainder of the State.*

Data for distinguishing the births in the metropolis from those in other districts are not available on a comparable basis beyond 1st January, 1927, because the births since that date have been allocated according to the

usual address of the mother and not according to the district of registration as formerly. The municipalities of Auburn, Bankstown, Granville, Lidcombe and Parramatta were added to the metropolitan area in 1929, and the municipalities of Dundas, Ermington and Rydalmere and the Pitt and Merrylands wards of Holroyd were added in 1933. For the purpose of comparison in the following table the metropolitan figures for years prior to 1933 have been adjusted to the present boundaries:—

Year.	Number of Live Births.			Live Births per 1,000 of Population.		
	Metropolis.	Remainder of State.	New South Wales.	Metropolis.	Remainder of State.	New South Wales.
1927	22,861	30,997	53,858	20.19	24.37	22.40
1928	23,580	31,220	54,800	20.33	24.01	22.27
1929	22,606	30,066	52,672	19.88	22.01	21.04
1930	22,201	29,935	52,136	18.51	22.46	20.59
1931	19,293	28,431	47,724	15.92	21.15	18.67
1932	17,774	27,131	44,905	14.52	20.01	17.41
1933	17,083	27,112	44,195	13.83	19.84	16.98
1934	16,538	26,797	43,335	13.30	19.41	16.52
1935	16,907	27,769	44,676	13.52	19.91	16.89
1936	17,759	28,434	46,193	14.11	20.18	17.31

The age and sex constitution of the metropolitan population is considerably different from that of the remainder of the State, therefore, comparisons of crude birth-rates are to be taken with reserve. That, on a comparable basis, the birth rate in the remainder of the State is higher than in the metropolis is indicated by the rates per 1,000 of all women aged 15-44. In 1933 this rate was 54.66 in the metropolis and 92.19 in the remainder of the State. These figures, however, are not strictly comparable as the proportion of married women of child-bearing age is greater in the remainder of the State than in the metropolis. In 1921 these proportions were 57 per cent. and 51 per cent. respectively, but data are not yet available from the 1933 census to determine the present position.

#### *The Sexes of Children.*

Of the 46,193 children born during 1936 (exclusive of those still-born), 23,669 were males and 22,524 were females, the proportion being 105.1 males to 100 females. As far as observation extends, the number of female births has not exceeded that of males in any year, although the difference has sometimes been very small.

The table below shows the number of males born alive to every 100 females born alive, both in nuptial and ex-nuptial births, since 1880:—

Years.	Nuptial Live Births.	Ex-Nuptial Live Births.	All Live Births.	Years.	Nuptial Live Births.	Ex-Nuptial Live Births.	All Live Births.
1880-84	104.9	103.9	104.8	1920-24	104.6	107.3	104.8
1885-89	105.4	98.8	105.1	1925-29	105.6	106.5	105.7
1890-94	105.7	105.4	105.7	1930-34	105.5	103.1	105.4
1895-99	105.0	105.4	105.1	1932	106.2	103.6	106.1
1900-04	104.3	102.8	104.2	1933	107.0	98.3	106.6
1905-09	105.0	104.9	105.0	1934	104.0	105.9	104.1
1910-14	105.2	105.0	105.2	1935	103.9	108.8	104.1
1915-19	105.3	104.0	105.2	1936	105.2	102.7	105.1

*Ex-Nuptial Live Births.*

The number of ex-nuptial live births in 1936 was 2,094, equal to 4.53 per cent. of the total live births and 0.78 per 1,000 of population. A statement of the ex-nuptial births in New South Wales since 1900 is given below:—

Period.	Number of Ex-nuptial Live Births.	Ratio per cent. to Total Live Births.	Crude Rate per 1,000 of Population.	Period.	Number of Ex-nuptial Live Births.	Ratio per cent. to Total Live Births.	Crude Rate per 1,000 of Population.
1900-04 ...	2,596	6.92	1.87	1930-34 ...	2,348	5.05	.91
1905-09 ...	2,915	6.98	1.92	1932 ... ..	2,350	5.23	.92
1910-14 ...	2,872	5.72	1.65	1933 ... ..	2,233	5.05	.86
1915-19 ...	2,581	5.03	1.34	1934 ... ..	2,069	4.77	.79
1920-24 ...	2,657	4.89	1.23	1935 ... ..	2,023	4.53	.77
1925-29 ...	2,725	5.06	1.13	1936 ... ..	2,094	4.53	.78

Over the whole State the proportion of ex-nuptial to total live births has declined in a marked degree since 1905. It rose gradually to 7.37 per cent. in 1905, after which a rapid decline occurred to 4.80 per cent. in 1916. The ratio rose again during the years 1917 to 1919, when the number of legitimate births declined, and it fell to 4.88 per cent. in 1920. In subsequent years, to 1930 the ratio was fairly constant, but a rise to 5.34 per cent. in 1931 was followed by a continuous decline.

The most accurate test as to the extent of ex-nuptial births is obtained by relating the total number of such births recorded to the number of unmarried women of child-bearing age. This can only be done satisfactorily at census periods, but it indicates that, though the proportion of such births was increasing up to about 1890, it declined considerably in the next thirty years, the proportion of ex-nuptial children born, per 1,000 unmarried women aged 15 to 44, having fallen from 18.41 in 1891 to 16.10 in 1901, 14.18 in 1911, 12.49 in 1921, and 8.20 in 1933, a decrease of 55 per cent. since 1891.

*First Live Births.*

A record has been kept of the number of first live births in each year commencing from 1893. By first live birth is meant the first child born alive to a mother since her marriage and includes only the first born of twins and triplets. The figures are restricted to births to married mothers as no details are shown as to other issue of the mother in registrations of ex-nuptial births.

The difference between the first births and the total nuptial births represents the number of births to married mothers with previous issue born living, but details as to the number of such previous issue are available only for the years 1894 to 1907.

In the following table are shown details of the first live births related to the total nuptial births in quinquennial periods since 1895:—

Period.	Nuptial Live Births.			Proportion of First Births to Total.
	To Mothers with no Previous Issue.	To Mothers with Previous Issue.	Total.	
1895-99 ...	34,793	137,876	172,669	per cent. 20·2
1900-04 ...	40,956	133,551	174,507	23·5
1905-09 ...	48,856	145,508	194,364	25·1
1910-14 ...	65,413	171,176	236,589	27·6
1915-19 ...	62,990	180,762	243,752	25·8
1920-24 ...	74,022	184,296	258,318	28·7
1925-29 ...	75,531	179,916	255,447	29·6
1930-34 ...	67,874	152,681	220,555	30·8
1932 ...	12,611	29,944	42,555	29·6
1933 ...	13,095	28,867	41,962	31·2
1934 ...	13,335	27,931	41,266	32·3
1935 ...	14,761	27,892	42,653	34·6
1936 ...	16,057	28,042	44,099	36·4

There has been a consistent rise in the proportion of first births, but, as the indications are that the proportion of first births to recent marriages began to fall only in the last decade, this may be conversely stated as a much greater decline in births after the first than in first births. Evidence of this trend is also seen in the table of birth rates in age groups which is shown on page 384. This showed that between 1891 and 1933 the decrease in birth rates in quinquennial age groups became progressively greater as age advanced; the lower ages at which first births are most frequent showing a decline which was relatively small to that at higher ages.

The interval between marriage and first live birth is published in detail in the "Statistical Register." A summary for 1936 is as follows:—

Interval.	Number of First Live Births.	Interval.	Number of First Live Births.
Under 1 month ...	116	1- 2 years ...	4,317
1- 2 months ...	160	2- 3 " ...	1,660
2- 3 " ...	246	3- 4 " ...	821
3- 4 " ...	416	4- 5 " ...	360
4- 5 " ...	562	5-10 " ...	702
5- 6 " ...	916	10-15 " ...	94
6- 7 " ...	1,288	15-20 " ...	18
7- 8 " ...	983	20-24 " ...	2
8- 9 " ...	592		
9-10 " ...	1,116		
10-11 " ...	932		
11-12 " ...	756	Total... ...	16,057

#### STILLBIRTHS.

The number of stillbirths registered in the State in 1936 was 1,419. Of these 820 were males and 599 females, the masculinity (137 males to 100 females) being considerably higher than amongst the live births (105 males to 100 females).

Amongst ex-nuptial births the frequency of stillbirth is higher than amongst the nuptial births, the respective proportions being 38.13 and 29.40 stillbirths to 1,000 of all births (live and still).

Of the total stillbirths 582 were in the metropolis and 837 in the remainder of the State the proportion per 1,000 of all births (live and still) being 31.73 in the former and 28.59 in the latter.

Details of the stillbirths registered since the inception of compulsory registration were as follow:—

Year.	Number of Stillbirths.				Rate per 1,000 of All Births (Live and Still).			Proportion of Ex-nuptial to Total Stillbirths.	Male Stillbirths per 1,000 Female Stillbirths.	
	Nuptial.		Ex-nuptial.		Total.	Nuptial.	Ex-nuptial.			Total.
	Males.	Females	Males.	Females						
1935 (April to December).	532	464	38	28	1,062	29.84	40.99	30.35	Per cent. 6.21	1,159
1936 ... ..	776	560	44	39	1,419	29.40	38.13	29.80	5.85	1,369

Prior to the date upon which compulsory registration was introduced the only information available in respect of stillbirths was the notification of such by midwives registered under the Nurses Registration Act. These numbered 819 in 1932, 921 in 1933, 847 in 1934, 889 in 1935, and 898 in 1936, but as notifications are made only by registered midwives in private practice it is evident that these figures are of little value.

#### PLURAL BIRTHS.

Prior to 1935 cases of plural births with one child only born alive were often recorded as single births. With the introduction of compulsory registration of stillbirths, as from 1st April, 1935, all cases of plural births are recorded, the consequent increase in the number of cases being reflected in the statement that whereas in 1934 only 15 cases of twins with one child stillborn were recorded there were 55 such cases in 1935.

During the year 1936 there were 538 cases of plural births. They consisted of 533 cases of twins; and 5 cases of triplets. The live children born as twins numbered 992 (500 males and 492 females), whilst 74 were stillborn, and the live children born as triplets numbered 13 (6 males and 7 females), while 2 were stillborn.

Of the plural births shown above 31 cases of twins were ex-nuptial.

The following table shows the number of cases of twins and triplets born in New South Wales during the year 1936, distinguishing nuptial and ex-nuptial:—

	Twins.				Triplets.		
	Both Born Living.	One Born Living, One Stillborn.	Both Still-born.	Total.	All Born Living.	One Still-born.	Total.
Nuptial ...	443	48	11	502	3	2	5
Ex-nuptial ...	28	2	1	31	...	...	...
Total ...	471	50	12	533	3	2	5

The number of cases of plural births recorded in 1936 represented 11.43 cases per 1000 confinements, while the number of children born at plural births was 2.27 per cent. of all births (both live and still).

It is not possible to make a comparison with earlier years on a similar basis; but excluding the cases of plural births in which all the children were stillborn there were 5,100 cases of twins and 48 cases of triplets in the 10 years 1927-1936. In this period the number of confinements (excluding stillbirths) was 479,504, hence the rates per million confinements were 10,636 cases of twins and 100 cases of triplets. Otherwise stated there were 11 cases of plural births in every 1,000 confinements.

The last case of quadruplets occurred in 1930, previous cases being in 1913, 1897, 1895, 1893, 1888 and 1877.

#### CONFINEMENTS.

As 1936 is the first full year for which the stillbirths have been registered it is now possible to show the actual number of confinements which produced the children shown in the previous tables.

The following table for the year 1936 shows the relationship between the confinements and the children born thereto:—

Class of Birth.	Confinements.		Children.						
	Married Mothers.	Un-married Mothers.	Born Living.		Stillborn.		All Births.		
			Nuptial.	Ex-nuptial.	Nuptial.	Ex-nuptial.	Nuptial.	Ex-nuptial.	Total.
Single Births ...	44,416	2,115	43,152	2,036	1,264	79	44,416	2,115	46,531
Twins—									
Both Living ...	443	28	886	56	...	...	886	56	942
One living, one stillborn.	48	2	48	2	48	2	96	4	100
Both still born	11	1	...	...	22	2	22	2	24
			934	58	70	4	1,004	62	1,066
Triplets—									
All living ...	3	...	9	...	...	...	9	...	9
One stillborn ...	2	...	4	...	2	...	6	...	6
Two stillborn ...	...	...	...	...	...	...	...	...	...
All stillborn ...	...	...	...	...	...	...	...	...	...
			13	...	2	...	15	...	15
Total	44,923	2,146	44,090	2,094	1,336	83	45,435	2,177	...
	47,069		46,193		1,419		.....		47,612

#### THE LEGITIMATION ACT, 1902.

In 1902 an Act was passed to legitimise children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Act, any child who comes within the scope of its purpose born before or after the passing thereof, is deemed to be legitimised from birth by the post-natal union of its parents, and entitled

to the status of offspring born in wedlock. The total number of registrations under the Act up to the end of the year 1936 was 13,259. The number in each year of the last ten years is shown in the following table:—

Year	Registrations.	Year.	Registrations.
1902-1925	7,781	1931	472
1926	532	1932	443
1927	646	1933	456
1928	668	1934	478
1929	496	1935	507
1930	385	1936	395

## NATURAL INCREASE.

The excess of births over deaths or "natural increase," during 1936 was 21,817, equal to 8.18 per 1,000 of the population.

The following table shows the natural increase of population since 1890:—

Year.	Natural Increase—Whole State.			Annual Rate of Natural Increase per 1,000 of Population.
	Males.	Females.	Total.	
1890-94	57,233	64,413	121,646	20.79
1895-99	49,885	57,746	107,631	16.67
1900-04	49,695	58,152	107,847	15.52
1905-09	61,652	68,993	130,645	17.23
1910-14	75,648	84,539	160,187	18.38
1915-19	71,992	82,005	153,997	15.98
1920-24	80,484	89,075	169,559	15.73
1925-29	73,812	82,169	155,981	12.98
1930-34	57,160	65,446	122,606	9.51
1932	11,008	12,540	23,548	9.13
1933	10,072	11,801	21,873	8.40
1934	8,931	10,930	19,861	7.57
1935	8,899	11,230	20,129	7.61
1936	10,051	11,766	21,817	8.17

Despite slight fluctuations the rate of natural increase is declining, and since 1922 the decline has been rapid. On account of the decrease in death-rates, the rate of natural increase prior to the war period had been improving slightly for about sixteen years. The increase per 1,000 of population for the five years 1915-19, however, was 13 per cent. lower than that for the previous quinquennium; in 1922 it showed a slight improvement as compared with the years immediately preceding it, but the average for the five years ending 1936, shows a decline of 56 per cent. below the pre-war quinquennium 1910-14.

Although the number of males born is more numerous than that of females, the increase of population from the excess of births over deaths is greatly in favour of the latter, since there is a disproportionately large number of deaths among males. During the ten years which closed with 1936, the number of females added to the population by excess of births over deaths exceeded the males by 16,899, or 14 per cent.

The respective increases from natural and migratory causes are shown in chapter "Population" of this Year Book.

Analyses of the natural and migratory increases in the population of the State since 1861 and of the various divisions of the State since 1911 are shown on pages 347 and 354 of this Year Book.

In the twelve years up to 1934, despite slight fluctuations, there was a considerable decline in the rates of natural increase in all the Australian States, followed by an almost general rise in 1935 and 1936. In New Zealand the rate has declined over the whole period. The table below shows the rates per 1,000 of population since 1931:—

State.	1931.	1932.	1933.	1934.	1935.	1936.
<i>New South Wales ...</i>	10·34	9·13	8·41	7·57	7·61	8·17
Victoria ...	7·39	5·89	6·00	5·01	5·13	5·47
Queensland ...	11·15	10·21	9·30	9·59	9·15	10·39
South Australia ...	7·28	6·16	6·88	5·24	5·31	5·87
Western Australia	11·26	9·76	9·31	8·43	8·98	9·44
Tasmania ...	12·03	10·88	10·33	9·27	9·16	9·50
Commonwealth ...	9·49	8·23	7·86	7·07	7·09	7·70
New Zealand ...	10·08	9·07	8·61	7·99	7·91	7·89

#### DEATHS.

The deaths (excluding stillbirths) during 1936 numbered 24,376, equal to a rate of 9.14 per 1,000 of the mean population. Of the total, 13,618 were males and 10,758 females, the rate for the former being 10.10 and for the latter 8.16 per 1,000 living of each of the sexes. The average annual number of deaths from 1880, with the rate per 1,000 of population, in quinquennial periods, was as follows:—

Period.	Average Annual Number of Deaths. (excluding Stillbirths.)			Death-rate per 1,000 of Population.			Proportion per cent. of Male to Female Rate.
	Males.	Females.	Total.	Males.	Females.	Total.	
1880-84	7,286	5,124	12,410	16·55	14·14	15·46	117
1885-89	8,461	6,043	14,504	15·43	13·36	14·49	115
1890-94	8,877	6,344	15,221	14·06	11·77	13·01	119
1895-99	9,002	6,514	15,516	13·11	10·77	12·01	122
1900-04	9,195	6,733	15,928	12·65	10·17	11·47	124
1905-09	9,076	6,583	15,659	11·52	9·04	10·33	127
1910-14	10,598	7,555	18,153	11·59	9·11	10·41	127
1915-19	11,919	8,613	20,532	12·20	9·07	10·66	135
1920-24	11,696	8,713	20,409	10·64	8·25	9·47	129
1925-29	12,836	9,732	22,618	10·52	8·27	9·42	127
1930-34	12,410	9,528	21,938	9·48	7·50	8·51	126
1932	12,110	9,247	21,357	9·25	7·28	8·28	127
1933	12,727	9,595	22,322	9·65	7·48	8·58	129
1934	13,173	10,301	23,474	9·91	7·96	8·95	124
1935	13,691	10,656	24,547	11·37	8·16	9·28	127
1936	13,618	10,758	24,376	10·10	8·16	9·14	124

The death-rate has fallen continuously for both sexes, but faster for females than for males. As shown above, the rate for both sexes combined during the five years 1880-84 was 75 per cent. higher than that experienced during the five years 1932-36. Many causes are responsible for this improvement, such as the enforcement of Health Acts, the advance of science, and the better education of the people. The remarkable effect of these factors on the death-rates of the population in the early years of life is dealt with later in connection with deaths of children under 1 year and under 5 years.

A table of the death-rates per 1,000 of mean population in each of the Australian States and in New Zealand from 1931 to 1936 is shown below:—

State.	1931.	1932.	1933.	1934.	1935.	1936.
<i>New South Wales</i> ...	8·33	8·28	8·58	8·95	9·28	9·14
<i>Victoria</i> ...	9·47	9·29	9·59	10·19	10·03	10·16
<i>Queensland</i> ...	8·14	8·35	8·81	8·57	9·16	8·78
<i>South Australia</i> ...	8·49	8·58	8·44	9·26	8·83	9·30
<i>Western Australia</i> ...	8·51	8·54	8·64	9·23	9·25	9·40
<i>Tasmania</i> ...	9·15	8·90	9·60	10·23	10·25	10·34
<i>Commonwealth</i> ...	8·67	8·63	8·92	9·32	9·46	9·43
<i>New Zealand</i> ...	8·34	8·02	7·98	8·48	8·22	8·75

This comparison represents the respective crude death-rates of the States enumerated, but the rates should be used with caution in so far as differences in the age and sex constitution of the individual populations have not been taken into account, therefore the rates are not strictly comparable with each other as showing the true incidence of mortality in the various States.

Such a comparison can be made by applying the rates of mortality in age and sex groups to a standard population embodying a fixed distribution according to age and sex. The resultant rates constitute an index of mortality or weighted average death-rate which, in effect, shows what would have been the death-rate if the age and sex distribution of the population compared each year had been in accordance with the standard adopted. The standard used is identical with that provided by the International Statistical Institute in Part II, p. viii of the *Annuaire International de Statistique*, 1917.

The index of mortality so calculated for each of the Australian States and New Zealand is shown below:—

State.	1931.	1932.	1933.	1934.	1935.	1936.
<i>New South Wales</i>	9·59	9·55	9·75	8·96	9·18	9·12
<i>Victoria</i> ...	9·88	9·72	10·02	9·30	9·08	9·23
<i>Queensland</i> ..	9·04	9·31	10·28	8·84	9·39	9·02
<i>South Australia</i> ...	8·69	8·79	8·76	8·39	7·97	8·36
<i>Western Australia</i> ..	10·99	11·15	11·04	9·45	9·47	9·62
<i>Tasmania</i> ...	10·14	9·88	10·39	9·43	9·54	9·60
<i>Commonwealth</i> ...	9·56	9·54	9·86	9·04	9·10	9·12
<i>New Zealand</i> ...	8·24	7·87	7·73	8·10	7·71	8·01

It is necessary to emphasise that the above rates are hypothetical and are serviceable only for purposes of comparison *inter se* and with death-rates of other countries calculated on the same basis. The age and sex distribution in the standard population is supposititious, being based on an agglomeration of European populations.

#### *Death-rates—Age and Sex.*

The remarks already made regarding the limitations in the use of crude birth-rates apply also to the conclusions to be drawn from tables of crude death-rates published above. The age and sex distribution of a population are most important factors to be considered in comparing death-rates between different States or in the same State over a period of years. This becomes evident in respect to New South Wales if the relative changes in the specific death rates in the various age groups over a period of fifty years, as shown on the next page, are studied in conjunction with the changing age distribution as shown on page 364.

The variation in the proportion of persons in the various age groups will have a considerable bearing on the crude death-rate of the whole population.

Again the death-rate of males is much higher than that of females. Consequently the increase in the proportion of females as shown on page 361 will be reflected in a corresponding decrease in the general rate.

In the following table death-rates are given for each sex in the principal age-groups during the triennial periods around each census since 1881.

Age Group (Years).	Death Rate per 1,000 Living—All Causes.						Reduction per cent, 1880-82 to 1932-34.
	1880-82.	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.	
Males							
0-4 ... ..	47.45	38.70	33.88	24.69	21.49	12.52	74
5-9 ... ..	3.13	3.51	2.16	2.05	1.85	1.41	55
10-14 ... ..	2.45	2.21	2.01	1.70	1.58	1.23	50
15-19 ... ..	3.85	3.33	3.43	2.43	2.17	1.68	56
20-24 ... ..	5.79	4.74	4.71	3.32	2.70	2.28	61
25-34 ... ..	7.64	6.50	5.56	4.31	3.75	2.49	67
35-44 ... ..	12.25	9.92	8.77	6.98	6.02	4.56	63
45-54 ... ..	18.99	16.23	14.56	12.45	10.86	9.56	50
55-64 ... ..	35.50	29.76	27.59	25.13	23.04	21.31	40
65-74 ... ..	67.23	61.89	60.13	55.69	51.61	49.26	27
75 and over ... ..	162.71	146.35	149.50	144.47	142.99	128.48	21
All Ages ... ..	16.72	14.24	12.90	11.59	10.72	9.60	43
Rate in 1880-82 = 100 ... ..	100	85	77	69	64	57	...
Females.							
0-4 ... ..	42.19	33.45	30.37	20.71	16.94	10.06	76
5-9 ... ..	2.77	3.26	1.99	1.76	1.64	1.18	57
10-14 ... ..	2.22	1.75	1.69	1.37	1.20	.83	63
15-19 ... ..	3.56	3.03	2.49	1.92	1.61	1.34	62
20-24 ... ..	5.31	4.14	3.82	3.17	2.43	2.03	62
25-34 ... ..	7.90	6.07	5.44	4.21	3.65	2.64	67
35-44 ... ..	11.10	8.86	7.53	5.96	4.88	3.99	64
45-54 ... ..	15.09	11.86	10.36	9.06	7.90	7.03	53
55-64 ... ..	26.83	22.56	20.02	17.60	15.73	14.21	47
65-74 ... ..	56.95	52.69	46.18	44.46	39.11	36.45	36
75 and over ... ..	138.58	142.28	134.48	125.29	124.53	107.40	22
All Ages ... ..	14.07	11.82	10.23	9.09	8.23	7.57	46
Rate in 1880-82 = 100 ... ..	100	84	73	65	58	54	...
Persons.							
0-4 ... ..	44.86	36.12	32.15	22.74	19.25	11.31	75
5-9 ... ..	2.95	3.39	2.08	1.91	1.75	1.30	56
10-14 ... ..	2.33	1.98	1.85	1.54	1.39	1.03	56
15-19 ... ..	3.70	3.18	2.96	2.18	1.90	1.51	59
20-24 ... ..	5.57	4.45	4.26	3.24	2.56	2.16	61
25-34 ... ..	7.75	6.32	5.50	4.26	3.70	2.56	67
35-44 ... ..	11.79	9.49	8.23	6.50	5.47	4.27	63
45-54 ... ..	17.54	14.48	12.79	10.97	9.46	8.33	52
55-64 ... ..	32.07	26.98	24.34	21.84	19.71	17.81	44
65-74 ... ..	63.37	58.07	54.43	50.61	45.81	43.02	32
75 and over ... ..	154.09	144.72	142.78	135.86	133.86	117.72	24
All Ages ... ..	15.52	13.13	11.63	10.40	9.50	8.60	45
Rate in 1880-82 = 100 ... ..	100	85	75	67	61	55	...

There was a steady reduction in the death-rates throughout the period, the improvement being greatest at ages under 5 years, then in the group 25 to 34 years. The rates for females were reduced to a greater extent than the rates for males in every age group up to 75 years, except at ages 25 to 34 years. It is noticeable that the reduction at ages 10 to 14 years was 63 per cent. amongst females and only 50 per cent. amongst males, the difference in rate of reduction amongst males and females being greatest in this group and at ages 65 to 74 years. Above that age improved conditions naturally had less effect.

The ages at which death-rates are most favourable are between 10 and 14 years; and between the ages of 5 and 45 years they are generally considerably below the average.

### *Expectation of Life.*

The effect of the improvement in death-rates in increasing the duration of life in Australia is indicated in the following statement, which shows the average expectation of life at specified ages according to the Australian mortality experience of the decades from 1881 to 1910 and the three years around the censuses of 1921 and 1933.

Age.	Males.					Females.				
	1881-90.	1891-1900.	1901-10.	1920-22.	1932-34.	1881-90.	1891-1900.	1901-10.	1920-22.	1932-34.
	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.
0	47.20	51.08	55.20	59.15	63.48	50.84	54.76	58.84	63.31	67.14
10	48.86	51.43	53.53	56.01	58.01	51.95	54.46	56.39	59.20	61.02
20	40.58	42.81	44.74	46.99	48.81	43.43	45.72	47.52	50.03	51.67
30	33.64	35.11	36.52	38.44	39.90	36.13	37.86	39.33	41.48	42.77
40	26.50	27.65	28.56	30.05	31.11	29.08	30.49	31.47	33.14	34.04
50	19.74	20.45	21.16	22.20	22.83	22.06	22.93	23.69	24.90	25.58
60	13.77	13.99	14.35	15.08	15.57	15.39	15.86	16.20	17.17	17.74
70	8.82	8.90	8.67	9.26	9.59	9.70	9.89	9.96	10.41	10.97
80	5.11	5.00	4.96	5.00	5.22	5.27	5.49	5.73	5.61	6.01
90	2.91	2.91	2.64	2.60	2.98	2.98	3.07	2.99	2.91	3.05
100	1.32	1.29	1.18	1.17	1.10	1.37	1.23	1.24	1.24	1.02

### *Deaths—Metropolis and Remainder of the State.*

A summary of the annual deaths and death rates in the metropolis and in the remainder of the State during the last ten years is shown below. Data for comparison with earlier years are not available owing to a change in the method of classification introduced at the beginning of the year 1927 by which the deaths are grouped according to the usual residence of the deceased persons, whereas they were allocated formerly to the district of registration. The area included in the metropolis was extended in January, 1929, by the addition of the municipalities of Auburn, Bankstown, Granville, Lidcombe and Parramatta, and in January, 1933, by the addition of the municipalities of Dundas, Ermington and Rydalmere and

the Pitt and Merrylands wards of Holroyd, and for the purposes of the comparison shown below the metropolitan figures for years prior to 1933 have been adjusted to the present boundaries.

Year.	Metropolis.		Remainder of the State.		New South Wales.	
	Number of Deaths (excluding stillbirths.)	Rate per 1,000 Living.	Number of Deaths (excluding stillbirths.)	Rate per 1,000 Living.	Number of Deaths (excluding stillbirths.)	Rate per 1,000 Living.
1927	11,756	10·38	11,014	8·66	22,770	9·47
1928	11,611	10·01	11,083	8·52	22,694	9·22
1929	12,585	11·07	12,030	8·81	24,615	9·83
1930	10,976	9·15	10,276	7·71	21,252	8·39
1931	11,020	9·09	10,264	7·63	21,284	8·33
1932	10,981	8·97	10,576	7·66	21,557	8·28
1933	11,580	9·37	10,742	7·86	22,322	8·58
1934	11,847	9·53	11,627	8·42	23,474	8·95
1935	12,552	10·04	11,995	8·60	24,547	9·28
1936	12,435	9·88	11,941	8·48	24,376	9·14

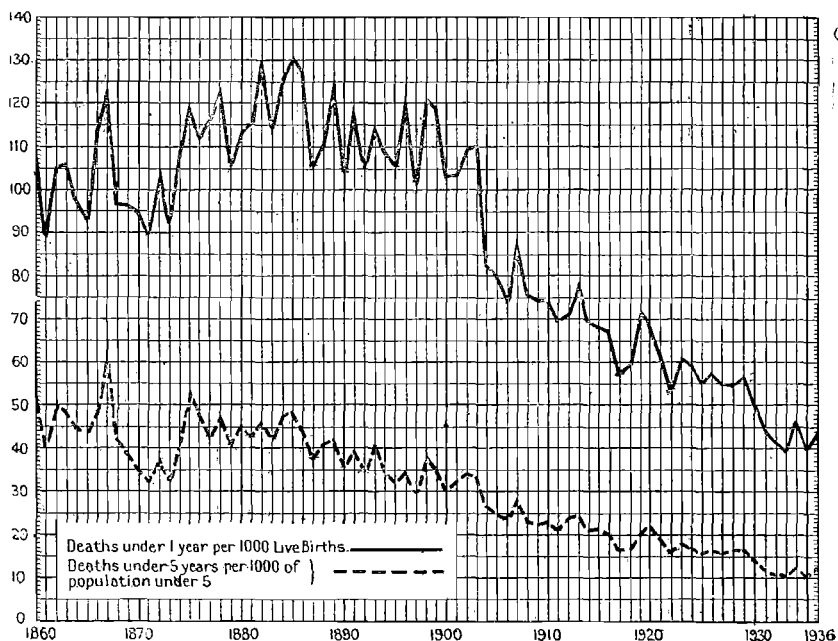
The death rate appears to be higher in the metropolis than in the country, but crude rates should be used with caution, owing to differences in the proportions of each sex and in the age composition of the populations of these divisions.

#### THE MORTALITY OF INFANTS.

*Deaths of Children under 1 Year of Age (excluding Stillbirths).*

During the year 1936 the children who died before completing the first year of life (excluding stillbirths) numbered 2,008, equivalent to a rate of 43·47 per 1,000 live births.

#### INFANTILE MORTALITY, 1860-1936.



The death-rate is higher for male infants than for females, the rates in 1936 being 46.5 and 40.3 per 1,000 live births, respectively. The rates for each sex are shown in the following table in quinquennial periods since the year 1880.

Period.	Males.		Females.		Total.	
	Annual Average Deaths under 1.	Rate per 1,000 Live Births.	Annual Average Deaths under 1.	Rate per 1,000 Live Births.	Annual Average Deaths under 1.	Rate per 1,000 Live Births.
1880-84	1,992	127.9	1,671	112.5	3,663	120.4
1885-89	2,405	127.2	2,019	112.3	4,424	120.0
1890-94	2,413	118.7	1,966	102.3	4,379	110.7
1895-99	2,304	121.4	1,914	105.9	4,218	113.9
1900-04	2,077	108.5	1,738	94.6	3,815	101.7
1905-09	1,832	85.6	1,458	71.5	3,290	78.7
1910-14	2,038	79.2	1,610	65.8	3,648	72.7
1915-19	1,892	71.9	1,440	57.6	3,332	64.9
1920-24	1,900	68.4	1,436	54.1	3,336	61.4
1925-29	1,682	60.8	1,319	50.4	3,001	55.8
1930-34	1,176	49.3	877	38.8	2,053	44.2
1932	1,053	45.5	791	36.3	1,844	41.1
1933	1,001	43.9	738	34.5	1,739	39.3
1934	1,123	50.8	886	41.7	2,009	46.4
1935	1,002	44.0	760	34.7	1,762	39.4
1936	1,100	46.5	908	40.3	2,008	43.5

During the period reviewed, the excess of the male rate over the female rate fluctuated from 16.4 in the quinquennium 1890-94 and in the year 1922 to a minimum of 6.9 in 1927. In 1936 the difference was 6.2.

The remarkable improvement which has taken place in the infantile mortality rate in the period covered by the above table is due in a large degree to the measures adopted to combat preventable diseases by health laws and by education. The first important step was taken in 1881, when the Infectious Diseases Supervision Act became law. In 1896 the Public Health Act was passed, and in 1902 the acts relating to Public Health were consolidated. About this time a world-wide movement drew attention to the benefit of breast-feeding and the dangers attending the methods of artificial feeding then in vogue. A scheme for the preservation of infant health was formulated by the Sydney Municipal Council in 1903, and instructional pamphlets were circulated for the guidance of mothers in the care and feeding of young children. In the following year trained women inspectors were appointed to visit mothers in the populous parts of the city and in the surrounding suburbs.

During the year 1904 infantile mortality showed a marked improvement on the rates experienced for about thirty years. A reference to the principal causes of death during the years immediately prior to and after the year in question will show that a decrease was experienced in all causes in which care and knowledge could have effect. Thus the mortality from diarrhoea and enteritis dropped from 36.90 per 1,000 live births in 1903 to 21.31 in 1904; tubercular diseases from 3.06 to 1.58; and congenital debility from 15.54 to 12.98.

Further efforts to reduce the rate of infantile mortality have been made since 1914 through the establishment in Sydney and in various country localities of baby health centres, and through the formation of a number

of public bodies which are affiliated with the Royal Society for the Welfare of Mothers and Babies. Particulars relating to these institutions will be found in chapter "Social Condition" of this Year Book.

In 1926 a Division of Maternal and Baby Welfare was created in the office of the Director-General of Public Health to supervise public activities relating to the health of women and children.

The decline in infantile mortality, especially in diarrhœal diseases, is illustrated by the following table, which gives the mortality rate per 1,000 live births since 1900 from diarrhœal diseases, and from all other causes:—

Period.	Deaths under 1 year of age per 1,000 Live Births.			Year.	Deaths under 1 year of age per 1,000 Live Births.		
	Diarrhœal Diseases.	All other Diseases.	All causes.		Diarrhœal Diseases.	All other Diseases.	All causes.
1900-04	29·52	72·21	101·73	1930	7·98	41·83	49·81
1905-09	21·06	57·66	78·72	1931	4·44	39·08	43·52
1910-14	20·64	52·04	72·68	1932	2·81	38·25	41·06
1915-19	13·94	50·97	64·91	1933	2·24	37·11	39·35
1920-24	13·77	47·64	61·41	1934	2·54	43·82	46·36
1925-29	8·94	46·83	55·77	1935	2·06	37·38	39·44
1930-34	4·14	40·05	44·19	1936	2·38	41·09	43·47

The work of the baby health centres has been instrumental in bringing about a reduction in the death rate from diarrhœal diseases. Seasonal conditions, however, tend to cause a fluctuation in the rate as in 1926 when the rainfall was below normal during several months and diarrhœal diseases caused 20 per cent. of the deaths of infants under one year of age.

#### *Infantile Mortality by Age.*

Of the total number of deaths of infants under 1 year of age in 1936 54 per cent. occurred within a week of birth; within the first month the proportion was 68 per cent., and within three months 77 per cent. The following statement shows the number and proportion of deaths at various ages under 1 year in the metropolis and in the whole State:—

Age at Death;	1935.				1936.			
	Metropolis.		State.		Metropolis.		State.	
	Number of Deaths.	Deaths per 1,000 Live Births.	Number of Deaths.	Deaths per 1,000 Live Births.	Number of Deaths.	Deaths per 1,000 Live Births.	Number of Deaths.	Deaths per 1,000 Live Births.
Under 1 week ...	367	21·71	1,027	22·99	398	22·41	1,092	23·64
1 week ...	34	2·01	120	2·69	54	3·04	139	3·01
2 weeks ...	19	1·12	43	·96	32	1·80	70	1·51
3 " ...	16	·95	50	1·12	23	1·30	65	1·41
Under 1 month, Total	436	25·79	1,240	27·76	507	28·55	1,366	29·57
1 month ...	26	1·54	91	2·04	46	2·59	113	2·46
2 months ...	19	1·13	63	1·41	24	1·35	75	1·62
3 " ...	22	1·30	49	1·09	17	·96	60	1·30
4 " ...	8	·47	50	1·12	17	·96	52	1·12
5 " ...	13	·77	29	·65	26	1·46	57	1·23
6 " ...	10	·59	35	·78	23	1·30	52	1·13
7 " ...	21	1·24	41	·92	13	·73	54	1·17
8 " ...	9	·53	43	·96	18	1·01	41	·89
9 " ...	12	·71	45	1·01	17	·96	47	1·02
10 " ...	17	1·01	45	1·01	16	·90	45	·97
11 " ...	9	·53	31	·69	17	·96	46	·99
Under 1 year, Total	602	35·61	1,762	39·44	741	41·73	2,008	43·47

Despite the marked decline in infantile mortality, the proportion of deaths of children under 1 week old is higher now than it was thirty years ago, while at all other ages under one year there has been a sustained improvement. This may be illustrated strikingly by the statement that, whereas the rate of mortality among children within one week of birth was 21.84 per 1,000 live births in the five years 1901-05 and 23.10 per 1,000 live births in the five years 1932-36, the corresponding rates among children over one week and under twelve months old were 75.18 per 1,000 in 1901-05, and 18.83 per 1,000 in 1932-36—a decline of 75 per cent.

It is shown on a later page that the principal causes of death among children in their first week of life were malformations and the diseases of early infancy, embracing congenital debility, premature birth, injury at birth, and others of early infancy, which in 1936 were responsible for almost 96 per cent. of the deaths of children during the first week of life, causing 22.72 deaths per 1,000 live births out of the total rate of 23.64. These causes are not generally connected with post-natal care of children, and they tend, when considered as an integral part of the rate of mortality, to obscure the remarkable improvement which has been effected by the dissemination of knowledge and the promotion of health measures for the care of infants. Although more skilful attention after birth may decrease the number of infants who died from pre-natal causes, it is recognised that a general improvement in the rate of mortality among infants in the first week of life will not be attained except through increased pre-natal care, and considerable attention is being given to the care and instruction of expectant mothers.

The following table shows the rates of mortality among infants in age groups during the first year of life in quinquennial periods since 1901. Details for each year from 1901 to 1930 inclusive are published in the 1930-31 issue of this Year Book.

Period.	Rate of Mortality per 1,000 Live Births among Children aged—						
	Under 1 week.	1 week and under 1 month.	1 month and under 3 months.	Total under 3 months.	3 months and under 6.	6 months and under 12.	Total under 1 year.
1901-04*	21.19	11.37	19.65	52.21	22.26	26.88	101.35
1905-09	22.36	10.12	13.21	45.69	15.34	17.69	78.72
1910-14	22.28	9.14	11.53	42.95	13.07	16.66	72.68
1915-19	24.53	8.02	9.15	41.70	9.22	13.99	64.91
1920-24	23.10	7.64	8.95	39.69	9.08	12.64	61.41
1925-29	23.37	6.76	6.90	37.03	7.35	11.39	55.77
1930-34	22.64	5.29	4.28	32.21	4.33	7.65	44.19
1932	22.94	4.72	3.58	31.24	3.07	6.75	41.06
1933	21.90	5.70	3.42	31.02	2.88	5.45	39.35
1934	24.02	5.12	4.94	34.08	4.76	7.52	46.36
1935	22.99	4.77	3.44	31.20	2.87	5.37	39.44
1936	23.64	5.93	4.07	33.64	3.66	6.17	43.47

\* Four year period.

Allowing for the operation of pre-natal causes upon the mortality in the first week of life, it is evident that pronounced improvement took place in the rates of infantile mortality immediately after the adoption of special educative measures in 1904 and 1914, and that, although special factors have operated to increase infantile mortality in certain years there has been a steady and sustained improvement. It is particularly noteworthy that the improvement is greatest among children aged one month and over. Up to that age the operation of pre-natal causes produces the majority of deaths.

In 1930 the rate was below 50 deaths per 1,000 live births for the first time on record, and in 1933 and 1935 it was less than 40 per 1,000.

*Infantile Mortality in Metropolis and Remainder of State.*

The number of deaths of children under one year of age in the metropolis in 1936 was 741, or 41.73 per 1,000 live births, and in the remainder of the State 1,267, or 44.56 per 1,000 live births.

The following table shows the annual number of deaths of children under 1 year of age in the metropolis and in the remainder of the State, and the proportion per 1,000 live births, in each of the last ten years. The basis of the classification as to locality is the usual residence of the mother:—

Period.	Metropolis.*		Remainder of State.*		New South Wales.	
	Deaths under 1.	Rate per 1,000 Live Births.	Deaths under 1.	Rate per 1,000 Live Births.	Deaths under 1.	Rate per 1,000 Live Births.
1927	1,284	56.2	1,676	54.1	2,960	55.0
1928	1,192	50.6	1,812	58.0	3,004	54.8
1929	1,270	56.2	1,713	57.0	2,983	56.6
1930	1,103	49.7	1,494	49.9	2,597	49.8
1931	860	44.6	1,217	42.8	2,077	43.5
1932	691	38.9	1,153	42.5	1,844	41.1
1933	629	36.8	1,110	40.9	1,739	39.3
1934	731	44.2	1,278	47.7	2,009	46.4
1935	602	35.61	1,160	41.77	1,762	39.44
1936	741	41.73	1,267	44.56	2,008	43.47

\* These figures on basis of boundaries as existing from 1933.

The following table shows a comparison of the rates of infantile mortality in the Australian States, in New Zealand, and in various other countries. The rates indicate the deaths under 1 year per 1,000 live births. As the rates quoted are for a single year only and fluctuate from year to year they do not show the permanent relativity between the rates prevailing in the countries named.

State or Country.	Year.	Rate.	Country.	Year.	Rate.
New Zealand ...	1936	30.96	Netherlands ...	1935	40
South Australia ...	1936	31.09	Sweden ...	1935	47
Queensland ...	1936	36.20	Switzerland ...	1935	48
Commonwealth ...	1936	41.16	Norway ...	1934	48
Western Australia ...	1936	42.22	England and Wales..	1935	57
Victoria ...	1936	42.31	* United States ...	1934	60
New South Wales ...	1936	43.47	† South Africa ...	1935	64
Tasmania ...	1936	49.55	Denmark ...	1934	64
			Irish Free State ...	1935	67
			Germany ...	1935	68
			France ...	1935	69
			Canada ...	1935	71
			Scotland ...	1935	77
			Northern Ireland ...	1935	86
			Belgium ...	1934	96
			Italy ...	1935	101
			Spain ...	1935	110
			Czechoslovakia ...	1935	123
			Japan ...	1934	125
			Hungary ...	1935	154
			Rumania ...	1935	192

\* Registration Area.

† White people only.

The rate of infantile mortality in New Zealand is the lowest of the rates shown in the foregoing table; and the rates for Australasia generally are greatly superior to those prevailing in most other countries for which comparable records are available. Wide differences between climatological and economic conditions should be allowed for in considering the relationship between the rates shown for the various countries.

### *Causes of Infantile Mortality.*

A table published on page 115 of the Statistical Register for 1919-20 and continued in subsequent years shows the rates of infantile mortality for each of the principal causes in each year since 1895. This indicates that there has been a great decline in the mortality from diarrhoea, enteritis, and other digestive diseases, congenital debility, nervous diseases, tubercular diseases, and bronchitis, diseases of the stomach, accident, and general diseases. On the other hand, deaths from malformation, premature birth, and diseases of early infancy have increased proportionately. The mortality from epidemic diseases fluctuates considerably with a tendency to decline.

The following table shows the incidence of mortality caused by the principal diseases among infants at various periods during the first year of life in 1936, showing the experience in the metropolis in comparison with that in the whole State:—

Cause of Death.	Deaths of Children under One Year of Age per 1,000 Live Births.							
	Metropolis.				State.			
	Under 1 week.	1 week and under 1 month.	1 month and under 1 year.	Total.	Under 1 week.	1 week and under 1 month.	1 month and under 1 year.	Total.
Epidemic Diseases ...	...	·06	2·14	2·20	...	·11	2·18	2·29
Tuberculosis ...	...	...	·23	·23	...	...	·17	·17
Syphilis ...	·06	·06	·11	·23	·06	·02	·11	·19
Meningitis ...	...	...	·51	·51	...	·02	·39	·41
Convulsions ...	...	...	·11	·11	·11	·07	·15	·33
Bronchitis ...	·06	...	·06	·12	·02	·06	·35	·43
Pneumonia ...	·28	1·13	3·60	5·01	·19	·76	3·94	4·89
Diarrhoea and Enteritis ...	...	·11	1·86	1·97	·02	·19	2·17	2·38
Malformation ...	2·36	·84	1·52	4·72	2·34	·69	1·32	4·35
Congenital Debility ...	1·07	·23	·05	1·35	1·41	·48	·32	2·21
Premature Birth ...	11·82	1·63	·06	13·51	12·73	1·65	·22	14·60
Injury at Birth ...	3·89	·45	·11	4·45	3·53	·56	·07	4·16
Other Diseases of early Infancy ...	2·31	·84	·17	3·32	2·71	·71	·15	3·57
All Other Causes ..	·56	·79	2·65	4·00	·52	·61	2·36	3·49
Total: ...	22·41	6·14	13·18	41·73	23·64	5·93	13·90	43·47

In 1936 approximately 96 per cent. of the deaths during the first week after birth and 67 per cent. of the deaths which occurred during the first year after birth were due to exclusively pre-natal causes, and diseases of early infancy or syphilis. Deaths from these causes during the first year

of life represented 29.08 per 1,000 births during the year. The incidence of diarrhœa and enteritis was comparatively light among children under the age of one month.

*Deaths of Ex-nuptial Children under 1 year.*

During 1936 there were 44,099 nuptial and 2,094 ex-nuptial children born alive. During the same period the deaths of nuptial children under 1 year of age numbered 1,882 and of ex-nuptial children 126.

The death rate of ex-nuptial children was 41 per cent. greater than the rate for nuptial children, partly owing to premature birth, infantile debility and inherited diseases, but to an equally great extent to causes arising from neglect.

How these combined causes operate to produce a comparatively high death rate among ex-nuptial children is shown in the following table which relates to the year 1936 and the quinquennium 1932-1936.

Age at Death.	Deaths per 1,000 Live Births, 1936.				Deaths per 1,000 Live Births, 1932-1936.			
	Nuptial.	Ex-nuptial.		Total.	Nuptial.	Ex-nuptial.		Total.
		Rate.	Per cent. of Nuptial Rate.			Rate.	Per cent. of Nuptial Rate.	
Under 1 week ..	23.24	32.00	138	23.64	22.26	39.56	178	23.10
1 week ...	2.97	3.82	129	3.01	2.64	3.43	130	2.68
2 weeks ...	1.48	2.39	161	1.51	1.27	1.58	124	1.28
3 „ ..	1.34	2.86	213	1.41	1.21	2.97	245	1.29
Total— under 1 month	29.03	41.07	141	29.57	27.38	47.54	174	28.35
1 month ...	2.43	2.86	118	2.46	2.24	3.07	137	2.28
2 months ...	1.56	2.86	183	1.62	1.48	3.99	270	1.60
3 „ ...	1.25	2.39	191	1.30	1.32	3.25	246	1.41
4 „ ...	1.16	.48	41	1.12	1.01	2.04	202	1.06
5 „ ...	1.22	1.43	117	1.23	.97	1.02	105	.97
6 „ ...	1.09	1.91	175	1.13	1.00	1.58	158	1.03
7 „ ...	1.18	.96	81	1.17	1.06	2.23	210	1.12
8 „ ...	.79	2.86	362	.89	.95	2.79	294	1.04
9 „ ...	1.04	.48	46	1.02	1.04	1.12	108	1.04
10 „ ...	.91	2.39	263	.97	1.00	1.67	167	1.03
11 „ ...	1.02	.48	47	.99	.97	1.39	143	.99
Total— under 1 year...	42.68	60.17	141	43.47	40.42	71.69	177	41.92

The number of ex-nuptial children who die during one year is comparatively small, consequently the rates of mortality for such children based on the experience of a single year are unstable.

A more reliable comparison is obtained by using figures based upon the quinquennial period. The experience of the five years 1932-36 shows that the largest proportional excess of deaths of ex-nuptial children over those of nuptial children is not immediately after birth, but usually one month or more later. During the first month of life the mortality of ex-nuptial children exceeded that of nuptial children by 74 per cent., by 37 per cent. in the second, by 170 per cent. in the third, 146 per cent. in the fourth and 102 in the fifth.

The following table shows the number of births and deaths and the rate per 1,000 live births of ex-nuptial as compared with those of nuptial children in New South Wales since 1900.

Year.	Total Live Births.		Deaths under 1 month.				Deaths under 1 year.			
			Nuptial.		Ex-Nuptial.		Nuptial.		Ex-Nuptial.	
	Nuptial.	Ex-Nuptial.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.
1900-04	174,507	12,982	*	*	*	*	15,712	90·04	3,361	258·90
1905-09	194,364	14,574	4,758†	30·16†	637†	54·62†	13,780	70·90	2,668	183·07
1910-14	236,589	14,363	7,150	30·22	734	51·10	15,901	67·21	2,338	162·78
1915-19	243,752	12,903	7,675	31·49	678	52·55	14,956	61·36	1,703	131·98
1920-24	258,318	13,286	7,726	29·91	624	46·97	15,194	58·82	1,485	111·77
1925-29	255,447	13,624	7,507	29·39	599	43·97	13,643	53·41	1,363	100·04
1930-34	220,555	11,740	5,957	27·01	532	45·32	9,354	42·41	912	77·68
1932	42,555	2,350	1,140	26·79	102	43·40	1,687	39·64	157	66·81
1933	41,962	2,233	1,107	26·38	113	50·61	1,575	37·53	164	73·44
1934	41,266	2,069	1,162	28·16	101	48·81	1,845	44·71	164	79·26
1935	42,653	2,023	1,130	26·49	110	54·38	1,601	37·54	161	79·58
1936	44,099	2,094	1,280	29·03	86	41·07	1,882	42·68	126	60·17

\* Not available.

† Four Years 1906-09.

The table shows that whilst the ex-nuptial death rates are uniformly high compared with the nuptial rates, they have improved considerably in the period covered by the table. In 1901, one out of every four ex-nuptial children died within a year of birth; the rate in 1936 was one in seventeen.

#### *Deaths of Children under 5 years.*

Apparently there has been a general improvement in the death-rate of all groups of children under 5 years of age, though the improvement has not been so marked at ages over 1 year as in the rates of infantile mortality.

The following table shows the mortality of children under 5 years of age:—

Period.	New South Wales.		Period.	New South Wales.	
	Average Annual Number of Deaths.	Rate per 1,000 Living.		Average Annual Number of Deaths.	Rate per 1,000 Living.
1890-94	6,220	37·5	1925-29	4,070	16·0
1895-99	5,693	34·2	1930-34	2,852	11·8
1900-04	5,056	31·4	1932	2,594	10·6
1905-09	4,335	24·7	1933	2,433	10·3
1910-14	4,881	22·9	1934	2,777	12·2
1915-19	4,676	19·5	1935	2,377	10·8
1920-24	4,518	18·5	1936	2,680	12·4

The rate of mortality in the quinquennium 1930-34, compared with that of 1890-94, represents a saving of 26 lives each year in every 1,000 children under 5 years in the State.

Children are more susceptible to the attacks of disease in the earlier years of life than later, and the death rate decreases steadily until the age of 10 years is reached. Since the rate for preventable diseases is high, there is no doubt that many children succumb through parental ignorance of the proper food or treatment required.

*Infantile Mortality and Stillbirths.*

Pre-natal causes being a common factor in both stillbirth and the mortality of infants subsequent to birth it is of interest to note the combined rate for stillbirths and deaths of children under one year of age.

In 1936 there were 1,419 stillbirths and 2,008 deaths under one year of age, making a total loss of 3,427 infants out of 47,612 live births and stillbirths. This represents a rate of 71.98 per 1,000 of all births.

The metropolitan rate on this basis is 72.13 and in the remainder of the State 71.88. This shows the loss of infant life in the metropolis to be greater than in the remainder of the State; being the reverse of the order disclosed by a consideration of deaths under one only.

It is not possible to give comparisons with former years as 1936 is the first complete year for which these figures are available.

## CAUSES OF DEATH.

The classification used for tabulating causes of death is in accordance with the International List of Causes of Death, with slight modification for use throughout Australia, and is based on the fourth decennial revision by the International Commission at Paris in 1929.

The complete list of causes of death in use is published in the Statistical Register of New South Wales, which shows the number of deaths from each cause according to age, sex, and month of occurrence.

The table published below is a summary of the principal individual causes of death in 1936, compared with the average annual number in the period 1931-35, adjusted to the population of the year 1936.

Causes of Death.	Adjusted Average 1931-35.	Number. 1936.	Proportion of Total 1932-36 per cent.	Causes of Death.	Adjusted Average 1931-35.	Number. 1936.	Proportion of Total, 1932-36 per cent.
Typhoid Fever ... ..	27	10	·10	Other Diseases of the Cir- culatory System ... ..	30	30	·13
Measles ... ..	42	22	·17	Bronchitis ... ..	331	251	1·29
Scarlet Fever ... ..	38	26	·15	Pneumonia ... ..	1,492	1,734	6·56
Whooping-cough ... ..	127	120	·48	Other Diseases of the Re- spiratory System ... ..	261	272	1·11
Diphtheria and Croup ... ..	181	220	·81	Diseases of the Stomach... ..	132	125	·55
Influenza ... ..	326	214	1·31	Diarrhoea and Enteritis (under 2 years)... ..	179	150	·64
Plague ... ..	..	..	..	Diarrhoea and Enteritis (2 years and over) ... ..	117	106	·47
Erysipelas ... ..	22	28	·09	Appendicitis ... ..	233	227	1·00
Infantile Paralysis† ... ..	21	11	·09	Hernia, Intestinal Obstruc- tion ... ..	210	190	·89
Lethargic Encephalitis ... ..	16	5	·06	Cirrhosis of the Liver ... ..	96	111	·41
Epidemic Cerebro-spinal Meningitis ... ..	7	4	·02	Other Diseases of the Di- gestive System ... ..	384	397	1·65
Other Epidemic Diseases ... ..	27	18	·10	Nephritis ... ..	1,466	1,549	6·36
Tuberculosis, Respiratory System ... ..	990	955	4·11	Other Genito-Urinary Di- seases ... ..	393	404	1·68
Tuberculosis Meninges and Nervous System ... ..	41	37	·16	Puerperal Septicæmia ... ..	70	82	·29
Other Tuberculous Di- seases ... ..	63	59	·26	Other Puerperal Diseases ... ..	208	210	·88
Cancer ... ..	2,781	2,781	11·52	Malformations ... ..	254	250	1·10
Diabetes ... ..	419	413	1·78	Congenital Debility ... ..	88	102	·36
Other General Diseases ... ..	559	620	2·42	Premature Birth ... ..	649	674	2·72
Diseases of the Blood ... ..	249	224	·99	Other Developmental Di- seases ... ..	318	357	1·39
Chronic Poisonings and Intoxications ... ..	27	20	·11	Senility ... ..	734	705	3·10
Meningitis... ..	99	103	·44	Suicide ... ..	321	291	1·36
Cerebral Hæmorrhage and Apoplexy ... ..	830	687	3·44	Accident ... ..	1,113	1,276*	4·85
Insanity ... ..	90	77	·30	Other Violence ... ..	116	97	·48
Convulsions of Infants ... ..	13	15	·06	All other Causes ... ..	225	225	·97
Other Diseases of the Ner- vous System ... ..	603	576	2·58				
Diseases of the Heart§ ... ..	5,146	5,829	23·03				
Diseases of the Arteries, Atheroma, &c.... ..	1,120	1,472	5·12				
				Total ... ..	23,175	24,376	100·00

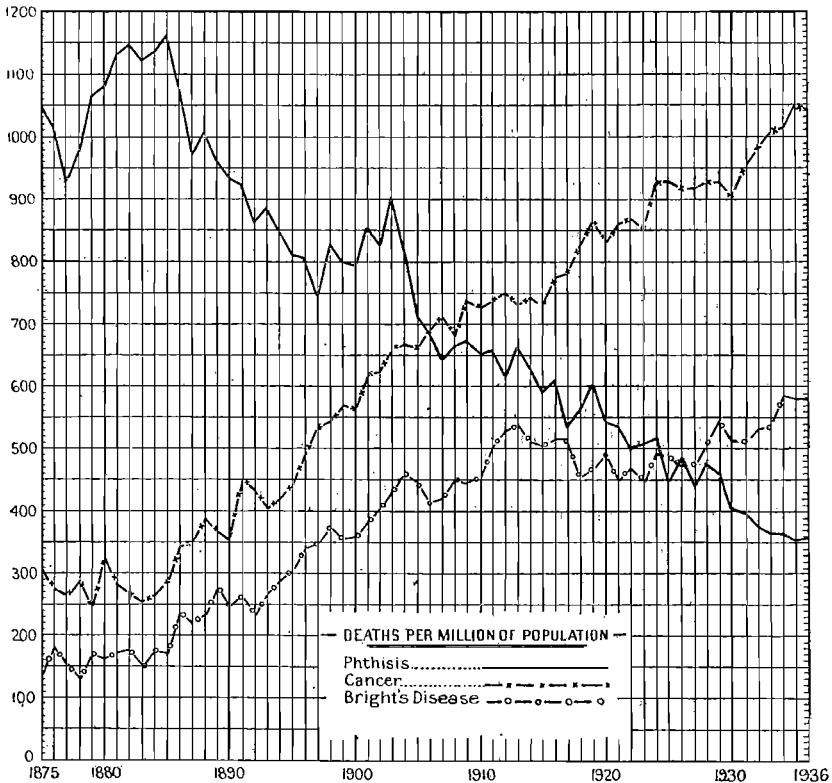
\* Includes 467 from motor accidents.  
  be grouped as infantile paralysis.

† Acute poliomyelitis and acute polioencephalitis have  
  § See remarks in paragraph on Heart Diseases on page 419.

Generally speaking, the mortality from tuberculosis, bronchitis, diarrhoea and enteritis, diphtheria, and typhoid fever is decreasing, while the mortality from diseases of the heart, cancer, diabetes, and Bright's disease is increasing.

The figures in the foregoing table cannot be compared as absolute numbers of the same relative importance because of the limitations of a system of classification depending upon a large number of independent observers

#### DEATH RATES—PRINCIPAL DISEASES—1875-1936.



with varying degrees of diagnostic equipment, and because the age incidence is very different for the several diseases. Some diseases of the heart and diseases of the arteries, etc., affect persons of advanced years, and from the standpoint of rate of natural increase are relatively less important than are diseases like tuberculosis and pneumonia, which cause heavy mortality between ages 20 and 65. The heading senility is unsatisfactory, as it embraces the deaths of aged persons in respect of whom the cause of death is not definitely stated in the returns. Many deaths of aged persons formerly attributed to senility are now ascribed to some form of heart disease, with the result that deaths from senility, so described, have shown a considerable decrease.

Interesting features of the table are that 7.01 per cent. of all deaths in the quinquennium 1932-36 were due to the following diseases, which are generally diseases of early childhood:—Diarrhoea and enteritis (under 2 years), malformations, diseases of infancy, whooping cough, convulsions of infants, measles, and infantile paralysis. Of the remaining deaths, more

than half are due to five major causes, diseases of the heart, cancer, pneumonia, tuberculosis, and Bright's disease. Deaths from violence represented 6.69 per cent. of the total.

In the pages which follow the experience in respect of a number of individual diseases is traced. Where the period covered is of considerable length, due allowance must be made for the effect of improvements in methods of diagnosis and classification and the general advance of medical knowledge. In some cases these factors have exercised a considerable influence upon the trend of the figures.

Apart from the records obtained by the compulsory notification, by medical practitioners, of certain infectious diseases reliable statistics are not available to show the number of cases of the various diseases occurring annually, but statistics have been collected of the occurrence of communicable diseases among school children since 1913. These show that epidemics of such diseases as measles, whooping-cough, scarlet fever, and diphtheria are of periodical recurrence, and, from time to time, assume large proportions. A large proportion of the deaths from these diseases are among children under school age, but the rate of mortality from them rises and falls with the recurrence of epidemics among school children. Statistics of the occurrence of infectious diseases among school children are collected quarterly, with the object of facilitating steps towards preventive and remedial measures.

### *Typhoid Fever.*

A steady improvement in the incidence of this disease is apparent, and the consequent mortality has been reduced to very small proportions.

The compulsory notification by medical practitioners of cases of typhoid fever has been in force since the 1st January, 1898.

The number of cases notified and deaths from typhoid fever, and the equivalent annual rates since 1884, are stated below:—

Period.	Cases Notified.		Deaths.					
	Number.	Rate per 10,000 living.	Males.		Females.		Total.	
			Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.
1884-88	*	*	1,356	5.12	1,115	5.13	2,471	5.13
1889-93	*	*	959	3.11	714	2.74	1,673	2.94
1894-98	*	*	1,107	3.27	731	2.46	1,838	2.89
1899-1903	16,406	23.95	1,054	2.93	733	2.25	1,787	2.61
1904-08	11,548	15.54	748	1.93	507	1.42	1,255	1.69
1909-13	11,503	13.66	773	1.75	464	1.15	1,237	1.47
1914-18	7,868	8.28	569	1.17	330	0.71	899	0.95
1919-23	4,401	4.18	353	0.66	241	0.47	594	0.56
1924-28	2,912	2.48	245	0.41	149	0.28	395	0.33
1929-33	1,579	1.24	115	0.18	72	0.11	187	0.15
1932	233	.90	18	0.14	13	0.10	31	0.12
1933	188	.72	17	0.13	11	0.09	28	0.11
1934	141	.54	15	0.11	4	0.03	19	0.07
1935	173	.65	15	0.11	5	0.04	20	0.08
1936	132	.49	13	0.10	6	0.05	19	0.07

\*Notifiable throughout the State from 1st January, 1898.

The rate of mortality from typhoid fever in 1936 represents only 7 persons per million living. This rate is 30 per cent. below that of the previous five years.

The decrease in the number and proportion of deaths due to this disease after 1888 was very marked, and may be traced to the operation of the Dairies Supervision Act, which became law in 1889. The rates show a further marked improvement as from 1903, and have dropped regularly,

until that for 1936 was only 1.4 per cent. of the rate for the period 1884-88. The rate is considerably higher than that experienced in England and Wales, where during 1935 it was only 4 per million living.

Owing to a superior system of sewerage and to the greater attention given to sanitary inspection and garbage disposal, the rate of mortality from typhoid fever in the metropolis is usually very much lower than in the remainder of the State. The persons who died in 1936 included 7 who resided in the metropolis and 12 in other districts. The rates per 10,000 living were 0.07 and 0.09 respectively.

Most deaths from typhoid fever occur during the summer and autumn. In 1936 there were three deaths during the summer months of December, January, and February, and 14 during the autumn months of March, April, and May; making a total of 17 out of 19 in the whole year.

#### *Smallpox.*

There has been no death from smallpox in New South Wales since the year 1915.

Vaccination is not compulsory in this State, and the precaution is rarely adopted unless epidemics threaten, as in the year 1913, when about 425,000 persons voluntarily submitted themselves to vaccination.

#### *Measles.*

Although measles is a common complaint, the resultant mortality is comparatively very small. The following statement shows the deaths from this cause, and the rate for each sex.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	166	0.63	165	0.76	331	0.69
1889-93	393	1.28	369	1.41	762	1.34
1894-98	338	1.00	324	1.09	662	1.04
1899-1903	160	0.44	219	0.67	379	0.55
1904-08	82	0.21	107	0.30	189	0.25
1909-13	309	0.70	267	0.66	576	0.68
1914-18	301	0.62	221	0.48	522	0.55
1919-23	207	0.39	183	0.35	390	0.37
1924-28	177	0.30	161	0.28	338	0.29
1929-33	137	0.21	117	0.19	254	0.20
1932	7	0.05	7	0.06	14	0.05
1933	20	0.15	25	0.19	45	0.17
1934	19	0.14	15	0.12	34	0.13
1935	47	0.35	36	0.28	83	0.31
1936	11	0.08	11	0.08	22	0.08

The high rates during the second and third quinquennial periods were due to severe outbreaks in 1893 and 1898.

Measles is a disease chiefly affecting children, and is periodically epidemic. It was epidemic in 1898-9, when 719 deaths were recorded; in 1912, when there were 371 fatal cases; and in 1915, when there were 324. During the year 1936 deaths from measles among children under 1 year of age numbered 2, and among children under 5 years of age 10. The total number of deaths in this year was 22.

#### *Scarlet Fever.*

In 1936 the number of deaths from this disease was 26, equivalent to a rate of 0.10 per 10,000 of the population. Of these, 15 occurred in the metropolis, and 11 in the remainder of the State, showing rates of 0.12 and 0.08 per 10,000 for the respective divisions. The rate of mortality from

this cause during 1936 was 32 per cent. below that of the preceding quinquennium. The number of cases notified and the deaths from scarlet fever and the equivalent annual rates have been as follows:—

Period.	Cases Notified.		Deaths.					
	Number.	Rate per 10,000 living.	Males.		Females.		Total.	
			Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.
1884-88	*	*	287	1·08	342	1·57	629	1·30
1889-93	*	*	185	0·60	236	0·90	421	0·74
1894-98	*	*	162	0·48	218	0·73	380	0·60
1899-1903	10,940	15·97	84	0·23	114	0·35	198	0·29
1904-08	14,239	19·16	88	0·23	91	0·26	179	0·24
1909-13	13,220	15·70	41	0·09	57	0·14	98	0·12
1914-18	20,864	21·95	112	0·23	161	0·35	273	0·29
1919-23	6,732	6·39	34	0·06	38	0·07	72	0·07
1924-28	25,119	21·38	142	0·24	185	0·32	327	0·28
1929-33	23,260	18·21	115	0·18	165	0·26	280	0·22
1932	4,905	19·01	16	0·12	41	0·32	57	0·22
1933	4,259	16·37	22	0·17	33	0·26	55	0·21
1934	2,166	8·26	9	0·07	10	0·08	19	0·07
1935	2,250	8·50	10	0·07	8	0·06	18	0·07
1936	3,939	14·76	12	0·09	14	0·11	26	0·10

\*Notifiable throughout the State from 1st January, 1898.

Like measles, scarlet fever is an epidemic disease which mainly affects children, the rate generally being somewhat higher for females than for males. Of the deaths during 1936, 7 were of children under 10 years of age, viz., 4 males and 3 females. Though not nearly so fatal as formerly, its sporadic recrudescence demands constant vigilance on the part of the authorities responsible for the health of the State. The death-rate from this cause of mortality has fluctuated since the year 1884, when it was very heavy, the rate per 10,000 inhabitants having ranged from 2·59 in that year to 0·04 in 1921.

#### *Whooping-cough.*

Whooping cough is another disease which mainly affects children, and to which, like scarlet fever, females are more susceptible than males. The number of deaths and rates of mortality for each sex since 1884 are shown below.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	327	1·24	472	2·17	799	1·66
1889-93	495	1·61	666	2·55	1,161	2·04
1894-98	343	1·01	502	1·69	845	1·33
1899-1903	573	1·59	726	2·23	1,299	1·90
1904-08	369	0·95	445	1·25	814	1·10
1909-13	377	0·86	436	1·09	813	0·97
1914-18	335	0·69	382	0·82	717	0·75
1919-23	440	0·82	497	0·96	937	0·89
1924-28	390	0·65	462	0·80	852	0·72
1929-33	285	0·44	363	0·58	648	0·51
1932	36	0·27	25	0·20	61	0·24
1933	9	0·07	16	0·12	25	0·10
1934	139	1·05	147	1·14	286	1·09
1935	31	0·23	32	0·24	63	0·24
1936	51	0·38	69	0·52	120	0·45

Whooping-cough may justly be regarded as a permanent menace and a constantly recurring ailment of infancy and childhood, for the table shows that periods of decline have generally been followed by increases in the death-rate, which is maintained by epidemic outbreaks, one such occurring in 1907, when 594 cases proved fatal, and the death-rate was the highest since 1878. Further epidemics occurred in 1913, 1920, 1921, 1925, 1927, 1929 and 1934, when the deaths were 344, 369, 257, 323, 211, 212 and 286 respectively.

Records kept since 1913 show that epidemics of whooping cough among school children are only second in magnitude to those of measles.

An examination of the table on a later page showing the seasonal prevalence of diseases indicates that whooping-cough is most fatal during the months of January and September to December.

### *Diphtheria and Croup.*

The death rate from diphtheria and croup was very high in the earlier years shown in the table below, but following the introduction of the use of diphtheria antitoxin in 1894 the death rate fell sharply.

Compulsory notification by medical practitioners of cases of diphtheria was instituted from 1st January, 1898, but in the first ten years the notifications were not complete.

Diphtheria and croup, under which heading membranous laryngitis is included, caused 220 deaths in 1936. Deaths from these diseases in the metropolitan area numbered 103, and those in the remainder of the State 117, the respective rates per 10,000 living for each division being 0.82 and 0.83. The following table shows the number of cases notified and deaths and the equivalent annual rates since 1884:—

Period.	Cases notified,		Deaths.					
			Males.		Females.		Total.	
	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.
1884-88	*	*	1,069	4.04	930	4.51	2,049	4.25
1889-93	*	*	1,433	4.65	1,399	5.36	2,832	4.98
1894-98	*	*	712	2.10	710	2.39	1,422	2.24
1899-1903	4,360	6.36	310	3.86	299	0.92	609	0.89
1904-08	7,298	9.82	367	0.95	338	0.95	705	0.95
1909-13	24,012	28.51	604	1.37	640	1.59	1,244	1.48
1914-18	29,213	30.74	659	1.36	682	1.47	1,341	1.41
1919-23	22,297	21.17	583	1.09	509	0.99	1,092	1.04
1924-28	18,841	16.03	448	0.75	394	0.68	842	0.72
1929-33	20,979	16.42	434	0.67	454	0.72	888	0.70
1932	4,310	16.71	84	0.64	76	0.60	160	0.62
1933	3,912	15.04	76	0.58	93	0.73	169	0.65
1934	6,167	23.51	95	0.71	98	0.76	193	0.74
1935	4,913	18.57	99	0.74	95	0.73	194	0.73
1936	7,064	26.48	118	0.87	102	0.77	220	0.82

\* Notifiable throughout the State from 1st January, 1898.

Mortality from diphtheria was heaviest during two lengthy periods, viz., from 1881 to 1898, and omitting the year 1919, from 1909 to 1921, although the rate was much lower in the latter period than in the former.

The experience of the quinquennial period 1932-36 shows the disease to be most fatal during the months of April, May, and June. Ninety-five per cent. of the persons who died from diphtheria during 1936 were under 10 years of age, and 60 per cent. were under 5 years of age.

In 1923 the Department of Health began a campaign of systematic testing of children for susceptibility to diphtheria by means of the Schick test, followed by voluntary immunisation. Although the numbers submitting for inoculation were not encouraging the campaign was gradually extended up to 1928 when it lapsed.

Following upon encouraging reports from other States and countries on the use of "anatoxin," immunisation has been recommenced in this State. In an effort to control the incidence of this disease the aim of the Department of Health is the immunisation of the majority of children at ages 1 to 14 years. Immunisation is purely voluntary, and children may be treated at public clinics or by private medical practitioners.

In June, 1934, a public clinic was opened at the Department of Health, but up to the 30th June, 1935, only 104 persons had been immunised. From 1st July, 1935, to March, 1936, 195 persons were treated. An intensive campaign was then commenced, and to the 31st July, 1937, a further 1,686 persons were immunised, making a total of 1,985 at this clinic. As part of this campaign the Municipal and Shire Councils, as the Local Health Authorities, were invited to co-operate with the Department of Health. A definite scheme was inaugurated, to operate from 1st June, 1936, whereby the Department of Health would repay the Councils the cost of the anatoxin used and supply certain other requirements.

At the 31st July, 1937, 143 councils or other bodies had clinics in operation, and to this date, in addition to those treated at the Departmental clinic 44,677 persons had been immunised. It is not possible to state the number treated by private practitioners.

### *Influenza.*

During 1936 there were 214 deaths due to influenza, the rate of mortality being 34 per cent. below the average of the previous quinquennium. Prior to 1891 the average annual number of deaths was 44, but during that year 988 deaths occurred from this cause. From 1892 to 1917 the average number of deaths was 198, but in 1918 an outbreak resulted in 372 deaths. This was completely overshadowed by the disastrous epidemic in 1919, when 6,387 persons died from the disease. An examination of the experience of that year will be found in the 1920 issue of this Year Book.

Since 1919 the mortality has been exceptionally heavy in 1923, 1929 and 1935.

In the following table the deaths at each outbreak are shown together with those in the intervening periods:—

Period.	Deaths.			Annual Rate per 10,000.
	Males.	Females.	Total.	
1875-1890	388	322	710	0.53
1891	549	439	988	8.65
1892-1917	2,799	2,397	5,196	1.27
1918	218	154	372	1.91
1919	3,851	2,536	6,387	31.93
1920-1922	460	420	880	1.39
1923	268	243	511	2.32
1924-1928	637	562	1,199	1.02
1929	293	248	541	2.16
1930-1934	612	529	1,141	0.88
1935	316	262	578	2.18
1936	127	87	214	0.80

Prior to 1919 influenza was essentially a disease fatal to young children and persons past 45 years of age, but in the severe world-wide epidemic of that year the disease was most fatal to persons in the prime of life (25 to

44 years). In issues of this Year Book up to 1933-34 it has been shown by comparing the deaths since 1920 with those of 1914-18 and 1919 in age groups representing approximately the different stages of life, that the character of the disease has reverted to the type experienced prior to 1919.

### *Tuberculous Diseases.*

The number of deaths ascribed to the several classified forms of tuberculous diseases during 1936 was 1,051, or 4.3 per cent. of the actual mortality in the State, and equal to 3.94 per 10,000 living—a rate 4 per cent. below the average for the preceding quinquennium.

A comparison of death-rates from tuberculous diseases in the Australian States and New Zealand for the last six years is given below. The rates are stated per 1,000 of the total population, and do not take account of differences in the distribution of age and sex in the respective populations, which have a material influence on the rates.

State.	Death-rate from tuberculous diseases per 1,000 of Total Population.					
	1931.	1932.	1933.	1934.	1935.	1936.
<i>New South Wales</i> ...	0.44	0.42	0.41	0.40	0.39	0.39
<i>Victoria</i> ...	0.55	0.53	0.47	0.49	0.48	0.47
<i>Queensland</i> ...	0.38	0.38	0.38	0.35	0.34	0.34
<i>South Australia</i> ...	0.53	0.48	0.52	0.48	0.44	0.40
<i>Western Australia</i> ...	0.57	0.51	0.49	0.55	0.51	0.46
<i>Tasmania</i> ...	0.54	0.53	0.56	0.49	0.57	0.58
<i>Commonwealth</i> ...	0.49	0.46	0.44	0.43	0.42	0.42
<i>New Zealand</i> ...	0.43	0.42	0.42	0.42	0.39	0.46

Mortality from tuberculosis diseases is usually lower in New South Wales than in any other Australian State except Queensland.

### *Tuberculosis of the Respiratory System.*

Tuberculosis of the respiratory system, or phthisis, was the cause of 955 deaths, or 91 per cent. of the number due to tuberculosis during the year 1936, being fifth in the order of magnitude among the fatal diseases of the State. The mortality rate per 10,000 living was 4 per cent. lower than in the previous quinquennium. The male rate in 1936 was 4.34 and the female rate 2.80.

The following table shows the number of deaths from tuberculosis of the respiratory system and the rates for each sex since 1884. This cause of death was formerly designated tuberculosis of the lungs:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living	Deaths	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	3,132	11.83	2,022	9.30	5,154	10.69
1889-93	3,269	10.61	1,925	7.38	5,194	9.13
1894-98	3,191	9.43	1,983	6.68	5,174	8.15
1899-1903	3,322	9.24	2,304	7.08	5,626	8.21
1904-08	2,985	7.72	2,184	6.13	5,169	6.96
1909-13	3,220	7.31	2,286	5.69	5,506	6.54
1914-18	3,373	6.95	2,194	4.72	5,567	5.86
1919-23	3,484	6.49	2,173	4.21	5,657	5.37
1924-28	3,337	5.57	2,217	3.85	5,554	4.73
1929-33	3,094	4.77	2,013	3.20	5,107	4.00
1932	582	4.45	387	3.05	969	3.70
1933	606	4.59	345	2.69	951	3.65
1934	567	4.26	388	3.00	955	3.64
1935	589	4.40	350	2.68	939	3.55
1936	586	4.34	369	2.80	955	3.58

The general rate in the last 5 years has decreased by 66 per cent. in comparison with the first quinquennium shown, that for females slightly more than that for males. The female rate ranged from 59 per cent. of the male rate in the year 1933 to 79 per cent. during the periods 1904-08 and 1884-88. In 1936 it was 64 per cent. of the male rate.

The improvement in the death-rate is due to many factors, such as the regulation of immigration, conditions of employment, etc., and the enforcement of the various Health Acts, but principally to the adoption of improved methods of medical treatment.

Pulmonary tuberculosis has been notifiable throughout the State since 1st March, 1929.

The table below shows the death-rates from tuberculosis of the respiratory system or phthisis according to age and sex during the triennial period around each census since 1891.

Age Group (Years).	Death Rate per 10,000 Living. Tuberculosis of the Respiratory System.				
	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Males.					
0-4 ... ..	·63	2·04	·57	·57	·09
5-9 ... ..	·41	·47	·31	·25	·08
10-14 ... ..	·85	·28	·49	·25	·08
15-19 ... ..	3·89	3·22	2·31	2·28	·75
20-24 ... ..	12·52	10·56	5·99	5·12	2·80
25-34 ... ..	17·91	14·37	9·72	9·18	4·66
35-44 ... ..	20·21	18·15	12·55	11·07	6·92
45-54 ... ..	20·07	19·79	15·49	12·97	10·06
55-64 ... ..	19·63	17·74	17·06	14·17	10·99
65-74 ... ..	15·84	19·24	13·37	10·27	9·36
75 and over ... ..	6·97	7·84	7·81	5·21	4·68
All Ages ... ..	10·38	9·48	7·17	6·44	4·43
Rate in 1890-92 = 100...	100	91	69	62	43
Females.					
0-4 ... ..	·93	1·43	·63	·42	·09
5-9 ... ..	·42	·48	·24	·35	·05
10-14 ... ..	·92	1·20	·59	·39	·27
15-19 ... ..	5·29	5·46	3·80	2·40	1·90
20-24 ... ..	10·47	7·99	7·74	5·92	5·21
25-34 ... ..	16·43	13·56	10·00	7·12	5·20
35-44 ... ..	15·84	13·41	9·80	6·46	4·24
45-54 ... ..	12·85	10·96	7·75	5·63	3·72
55-64 ... ..	9·81	11·96	8·34	5·32	3·29
65-74 ... ..	11·17	7·31	10·60	6·14	3·52
75 and over ... ..	4·18	2·59	3·84	3·19	2·55
All Ages ... ..	7·50	6·95	5·64	4·02	2·91
Rate in 1890-92 = 100...	100	93	75	54	39
Persons.					
0-4 ... ..	·78	1·74	·60	·50	·09
5-9 ... ..	·41	·48	·27	·30	·07
10-14 ... ..	·88	·73	·54	·32	·17
15-19 ... ..	4·59	4·34	3·04	2·34	1·32
20-24 ... ..	11·54	9·26	6·84	5·53	3·98
25-34 ... ..	17·28	13·98	9·86	8·15	4·93
35-44 ... ..	18·43	16·09	11·27	8·84	5·57
45-54 ... ..	17·17	16·06	12·10	9·50	6·99
55-64 ... ..	15·84	15·26	13·25	10·13	7·20
65-74 ... ..	13·90	14·36	12·12	8·35	6·51
75 and over ... ..	5·85	5·49	6·03	4·21	3·59
All Ages ... ..	9·06	8·28	6·44	5·25	3·68
Rate in 1890-92 = 100...	100	91	71	58	41

The rate improved to a greater extent amongst males than amongst females between 1890-92 and 1910-12, but in later years there has been a greater reduction amongst females.

A comparison of the death rates from phthisis in the various age groups shows a remarkable difference in respect of men and women. Excluding the age groups below 15 years where mortality is comparatively light the rates for females are the higher in the groups up to 35 years and above that age there is a large excess of deaths amongst males, the rate amongst men in the group 55-64 years being more than three times the corresponding rate amongst women. In this group the male death rate from phthisis reaches the maximum. Amongst females the rate has generally been highest at ages 25 to 34 years, then decreases up to ages 55 to 64 years, but in the group 65-74 years it rises slightly.

#### *Other Tuberculous Diseases.*

Of the 1,051 deaths during 1936 from tuberculosis, only 96 were from tuberculosis of organs other than the respiratory system. For the year 1936, 18 deaths, equivalent to 19 per cent., were of children under 5 years of age. Taking the age group under 5 years, and all ages, the following table shows the distinct improvement in the death-rates since the decennium 1891-1900:—

Period.	Deaths per 10,000 living—Tuberculosis other than Respiratory System.					
	Ages under 5 Years.			All Ages.		
	Males.	Females.	Total.	Males.	Females.	Total.
1891-1900	15·93	13·41	14·69	2·76	2·62	2·69
1901-1910	7·11	5·98	6·55	1·70	1·51	1·61
1911-1920	3·13	2·96	3·06	1·00	·86	·93
1921-1930	1·85	1·67	1·76	·63	·52	·58
1931	1·41	1·15	1·28	·49	·37	·43
1932	1·29	1·17	1·23	·49	·30	·39
1933	1·59	·86	1·23	·48	·38	·43
1934	1·47	1·44	1·46	·35	·33	·34
1935	1·34	1·40	1·37	·37	·31	·34
1936	1·00	·66	·84	·37	·35	·36

#### *Cancer.*

In 1936 the deaths from cancer numbered 2,781, equal to a rate of 10·42 per 10,000 living. The average rate of mortality in the five years 1932-36 was much higher than in any preceding period, being 10·19 per 10,000 living as compared with 3·30 for the period 1884-88. The total for 1936 included 1,379 males and 1,402 females, the rates being 10·22 and 10·63 per 10,000 living of each sex respectively.

Classified according to the parts of the body affected and arranged in order of fatality, cancer caused the following deaths in 1936:—Stomach and duodenum 674, intestines 380, other of digestive tract 404, female genital organs 301, breast 283, male genito-urinary organs 211, buccal cavity 147, respiratory organs 127, skin 79, and other organs 175.

The following table shows the deaths and rates of each sex since 1884:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	859	3·25	732	3·37	1,591	3·30
1889-93	1,262	4·10	1,038	3·98	2,300	4·04
1894-98	1,719	5·09	1,387	4·68	3,106	4·89
1899-1903	2,295	6·38	1,877	5·77	4,172	6·09
1904-08	2,671	6·91	2,418	6·78	5,089	6·85
1909-13	3,362	7·63	2,860	7·12	6,222	7·39
1914-18	3,886	8·00	3,458	7·44	7,344	7·73
1919-23	4,738	8·82	4,292	8·31	9,030	8·57
1924-28	5,790	9·66	5,068	8·80	10,858	9·24
1929-33	6,501	10·01	5,704	9·08	12,205	9·55
1932	1,405	10·73	1,129	8·88	2,534	9·82
1933	1,394	10·57	1,226	9·56	2,620	10·07
1934	1,369	10·30	1,293	9·99	2,662	10·15
1935	1,451	10·84	1,321	10·11	2,772	10·48
1936	1,379	10·22	1,402	10·63	2,781	10·42

In New South Wales the crude male rate is usually the higher. In England and Wales, on the other hand, the crude female rate is usually the higher though the standardised rates—for which the age distribution of the population of each sex is taken into consideration—show the male rate as the higher in each year since 1924. In the period 1911-1914 the standardised female rate in England was higher than the male rate, and in 1922 and 1923 these rates for both sexes were practically equal. The change is attributed by the Registrar-General in his Annual Review to the operation of two factors which probably exercise some influence in New South Wales, viz.—(i) The success of operations upon the relatively more accessible cancers of females, and (ii) the better diagnosis of the less accessible cancers of females as a consequence of improved medical appliances and knowledge. In England and Wales, also, the crude rate for both sexes combined is usually much higher, and is increasing more rapidly than in New South Wales.

The ages of the 2,781 persons who died from cancer in New South Wales during 1936 ranged from 9 months to 94 years, but the disease is one of advanced age, 97 per cent. of the persons who died from cancer in 1936 being 35 years and over.

In the following table are shown the death-rates from cancer for each sex in age groups above 25 years, during the triennial periods around each census since 1891.

Age Group (Years).	Death Rate per 10,000 Living.—Cancer.				
	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Males.					
25-34 ... ..	1.06	1.02	.95	.94	.99
35-44 ... ..	3.67	3.95	4.23	3.61	3.15
45-54 ... ..	12.25	12.73	13.48	13.67	11.58
55-64 ... ..	26.02	37.01	36.65	38.13	36.30
65-74 ... ..	44.24	66.71	74.84	77.29	85.83
75 and over ... ..	49.50	79.46	96.27	116.46	129.06
All Ages ... ..	4.29	6.46	7.67	8.74	10.53
Rate in 1890-92 = 100...	100	151	179	204	245
Females.					
25-34 ... ..	1.03	1.03	1.48	1.46	1.25
35-44 ... ..	6.42	6.59	6.95	6.29	6.35
45-54 ... ..	16.80	18.04	18.32	18.53	16.74
55-64 ... ..	29.96	33.85	35.40	35.91	33.24
65-74 ... ..	38.51	57.30	59.66	66.23	55.66
75 and over ... ..	45.93	76.94	93.96	104.09	93.72
All Ages ... ..	3.97	5.57	7.12	8.36	9.48
Rate in 1890-92 = 100...	100	140	179	211	239
Persons.					
25-34 ... ..	1.05	1.03	1.21	1.20	1.11
35-44 ... ..	4.79	5.10	5.50	4.91	4.77
45-54 ... ..	14.08	14.97	15.60	15.97	14.08
55-64 ... ..	27.54	35.65	36.10	37.11	34.79
65-74 ... ..	41.87	62.87	67.98	72.15	71.13
75 and over ... ..	48.07	78.33	95.23	110.34	111.02
All Ages ... ..	4.15	6.04	7.41	8.55	10.01
Rate in 1890-92 = 100...	100	146	179	206	241

There has been a continuous increase in the death rate from cancer. The increase between 1890-92 and 1910-12 was 79 per cent. for both males and females and the subsequent increase 37 per cent. for males and 34 per cent. in the rate for females. The rate is higher amongst females than males up to age 55 years, but the male rate is the higher in later ages.

In all countries for which records are kept the death rate from cancer has been increasing and great attention is being given to the problem of the control of cancer.

In 1921 the University of Sydney established a Cancer Research Committee, for which funds were made available by contributions from the Commonwealth and State Governments and by private donations and bequests. Laboratories were equipped within the University, research workers engaged to conduct investigations locally and abroad, and treatment centres were established within certain hospitals.

The State Department of Health, in 1932, established a deep X-ray therapy department at the Coast (now Prince Henry) Hospital, and similar departments have been established in several other metropolitan hospitals. Steps have also been taken to set up a consultative clinic at the Newcastle Hospital.

Portion of a supply of radium purchased by the Commonwealth Government in 1927 has been made available for use in nine hospitals in New South Wales, including those mentioned above, and to the Cancer Research Committee, and through the latter to approved practitioners for use in private practice.

Co-ordination of action throughout Australia is made possible by the Australian Cancer Conference, convened annually by the Commonwealth Department of Health. Through this department, also, cancer workers in Australia are kept in touch with the Cancer Commission of the Health Organisation of the League of Nations, the Radium Commission in Great Britain, the British Empire Cancer Campaign Society, the International Union against Cancer and with national movements in many countries.

Following upon the recommendation of the Seventh Australian Cancer Conference in 1936, the Commonwealth Government, with the acquiescence of the State Governments, created the National Health and Medical Research Council, so that public health matters should receive more adequate review and so that medical research should be fostered and developed in Australia. The Council was instituted in September, 1936, and comprises representatives of the various Health Departments, medical organisations, a University representative, and two lay people.

In the following table the rates of mortality from cancer are given for the Australian States and New Zealand. The comparison is upon the crude basis of total population and is uncorrected for age and sex incidence.

State.	Cancer Death-rate per 1,000 of Total Population.						
	1930.	1931.	1932.	1933.	1934.	1935.	1936.
<i>New South Wales</i> ...	0.90	0.95	0.98	1.01	1.01	1.05	1.04
<i>Victoria</i> ...	1.04	1.09	1.18	1.18	1.19	1.23	1.24
<i>Queensland</i> ...	0.82	0.95	0.93	0.91	0.92	0.96	0.99
<i>South Australia</i> ...	1.04	1.20	1.13	1.17	1.12	1.04	1.26
<i>Western Australia</i> ...	0.97	0.94	1.03	0.94	1.02	1.06	1.07
<i>Tasmania</i> ...	0.93	0.98	1.01	1.09	1.13	1.14	1.23
<i>Commonwealth</i> ...	0.95	1.01	1.05	1.05	1.06	1.09	1.11
<i>New Zealand</i> ...	1.02	1.03	1.01	1.11	1.15	1.12	1.18

### *Diabetes.*

The proportion of deaths due to diabetes has been growing during the past twenty-five years. Although the disease is responsible for less than 2 per cent. of the annual number of deaths the rate of mortality from diabetes has increased, the average of the last five years being 84 per cent. higher than that for the period 1906-10.

The deaths due to diabetes in 1936 numbered 413, equal to a rate of 1.55 per 10,000 living. The rate for males was 0.94 and for females 2.17 per 10,000 living of each sex. Most of the deaths occurred after middle life, 382 out of 413 deaths in 1936, or 92 per cent. being persons over 45 years of age.

### *Meningitis.*

The diseases included under the above heading—encephalitis, simple meningitis, and non-epidemic cerebro-spinal meningitis—caused 103 deaths during 1936; the corresponding rate being 0.39 per 10,000 living. Of this number, 64 were males and 39 females, equivalent to rates per 10,000 living

of each sex of 0.47 and 0.30 respectively. The deaths in the metropolis and country were 58 and 45, with corresponding rates per 10,000 living of 0.46 and 0.32.

Of those who died during 1936, 37, or 36 per cent., were under 5 years of age.

### *Hæmorrhage of the Brain.*

Mortality from this cause showed a slow but sustained increase for twenty years prior to the quinquennium 1909-13, then there was an appreciable decline until 1924. Since that year the figures are not strictly comparable owing to changes in the method of classification due to a revision in the classification of causes of death. In 1925 greater preference was given to cerebral hæmorrhage as a cause of death when found in combination with diseases of the arteries, atheroma, etc. In 1928, however, a further change was made, and all cases of arterio-sclerosis combined with any cerebral vascular lesion have since been included with diseases of the arteries. The introduction from 1st April, 1935, of an amended form of medical certificate of cause of death has been further instrumental in reducing the number of deaths ascribed to this title, as the additional information derived has enabled the classification to be made as just mentioned.

The number of deaths due to cerebral hæmorrhage and apoplexy during the year 1936 under the new classification was 687, of which 332 were males and 355 females. The rate was 2.58 per 10,000 living, viz., 2.46 for males and 2.69 for females.

The following table shows the number of deaths and the rates for both sexes from cerebral hæmorrhage and apoplexy since 1884, but the comparison over the last nine years is affected by the alterations in certification and classification mentioned above.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	778	2.97	467	2.15	1,245	2.58
1889-93	796	2.58	618	2.37	1,414	2.48
1894-98	943	2.79	710	2.39	1,653	2.60
1899-1903	1,050	2.92	788	2.42	1,838	2.68
1904-08	1,303	3.31	1,039	2.91	2,342	3.15
1909-13	1,627	3.69	1,439	3.58	3,066	3.64
1914-18	1,693	3.49	1,431	3.08	3,124	3.29
1919-23	1,735	3.23	1,587	3.07	3,322	3.15
1924-28	2,225	3.71	2,210	3.84	4,435	3.77
1929-33	2,025	3.12	2,132	3.39	4,157	3.25
1932	434	3.32	438	3.45	872	3.38
1933	444	3.37	477	3.72	921	3.54
1934	397	2.99	429	3.31	826	3.15
1935	316	2.36	370	2.83	686	2.59
1936	332	2.46	355	2.69	687	2.58

### *Convulsions of Children.*

Convulsions of children (under 5 years of age) caused 15 deaths during 1936, or 0.06 per 10,000 living at all ages, which is 12 per cent. above the rate for the previous quinquennium.

The following table shows the number of deaths and the rates from convulsions of children for both sexes in periods since 1875:—

Year.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1875-79	1,538	8.93	1,291	8.94	2,829	8.93
1880-84	2,007	9.12	1,600	8.83	3,607	8.99
1885-89	1,916	6.99	1,615	7.14	3,531	7.06
1890-94	1,601	5.07	1,355	5.03	2,956	5.05
1895-99	1,281	3.73	1,119	3.70	2,400	3.72
1900-04	781	2.15	625	1.89	1,406	2.02
1905-09	550	1.40	480	1.32	1,030	1.36
1910-14	458	1.00	343	0.83	801	0.92
1915-19	404	0.83	291	0.61	695	0.72
1920-24	208	0.38	183	0.35	391	0.36
1925-29	145	0.23	98	0.16	243	0.20
1930-34	38	0.08	35	0.06	73	0.06
1932	6	0.05	10	0.08	16	0.06
1933	8	0.06	7	0.05	15	0.06
1934	7	0.05	4	0.03	11	0.04
1935	3	0.02	7	0.05	10	0.04
1936	12	0.09	3	0.02	15	0.06

The rates of mortality ascribed to this cause show a remarkable decline, due partly to increasing skill in diagnosing the diseases of children. Numerous deaths having convulsions as their immediate cause are now ascribed to some other cause which led to convulsions.

Being limited to children under 5 years of age, the rates are better stated proportionately at that age-period. On this basis the death-rate in 1936 was 0.70 per 10,000, as compared with 0.56 of the previous quinquennium. All the deaths in 1936 occurred during the first year of life, the equivalent rate being 0.33 per 1,000 births.

### *Insanity.*

Classed as a distinct disease of the nervous system, insanity causes death from general paralysis of the insane and from other forms of mental alienation. Practically all the persons in New South Wales coming within this classification are under treatment in the various mental hospitals. On the 30th June, 1936, there were 11,018 persons under official cognisance, excluding 32 in reception houses and observation wards and gaols, but including 9 patients from the Broken Hill district who were under treatment in South Australian hospitals. The proportion per 1,000 of the population was 4.13 or about 5.6 per cent. more than the average for the previous five years.

The number of deaths from insanity in the year 1936 was 77—54 males and 23 females. The death-rate per 10,000 living was 0.40 for males and 0.17 for females. In England and Wales the corresponding figures in 1935 were 0.60 and 0.43.

In the year 1935-36 there were 659 deaths in mental hospitals, equivalent to 65.2 per 1,000 of the average number of patients in residence. The rate of mortality, however, is not comparable with that of the general population, because the proportion of mental patients under the age of 20 years is very small, due, doubtless, to the facts that many children mentally afflicted are cared for in their homes, and that mental alienation frequently does not become manifest until middle or advanced age is reached.

A comparison of the mortality of the adult patients in mental hospitals with that of the general population in age groups shows that at all ages the

rate of mortality among the former is very much higher than among the general population. The disparity is greatest in the earlier years of adult life but diminishes as age increases.

#### *Diseases of the Heart.*

Statistics of mortality from diseases of the heart are of limited value, because there are important factors connected with the mode of certification and classification which affect the numbers from year to year.

The causes classified as diseases of the heart include pericarditis, endocarditis and other valvular diseases, diseases of the myocardium, angina pectoris, and, in 1931, and subsequent years diseases of the coronary arteries.

The figures in the following statement indicate that the death-rate in respect of diseases of the heart has more than doubled during the last thirty years. This may be due to an actual increase in mortality from these causes or it may be rather a result of more highly specialised biological knowledge and of greater attention to pathological diagnoses. There is no doubt, for instance, that many deaths recorded in former years as being caused by senile decay would be assigned now to some cardiac trouble. Moreover, it is considered that there has been an increasing tendency on the part of medical practitioners in recent years to give prominence to myocarditis as a cause of death, whether it was chronic or a terminal condition supervening in illness due primarily to some other cause. Again death certificates frequently show diseases of the heart in combination with one or more other diseases as the cause of death, and in classifying such certificates according to cause, definite principles are observed, a large measure of preference being given to diseases of the heart. This is another factor which may have operated in the direction of swelling the increase in the number of deaths ascribed to this group of diseases. It is not practicable, however, to gauge the effects of the various changes which occur over a period of years, so that the figures may not be regarded as a satisfactory basis for comparison.

A further factor contributing to the apparent increase, but which, however, can be analysed, is the changing age composition of the population. Larger proportions of the people are reaching the ages at which the death-rate from these causes is highest. An analysis of the deaths according to age is shown on the next page, but the figures for any particular age-group are subject to the factors mentioned above.

The number of deaths ascribed to diseases of the heart since 1884, and the death-rates of each sex, are shown below:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	2,149	8·12	1,390	6·39	3,539	7·34
1889-93	2,250	7·30	1,357	5·20	3,607	6·34
1894-98	2,434	7·19	1,478	4·98	3,912	6·16
1899-1903	2,917	8·11	1,932	5·94	4,849	7·08
1904-1908	3,791	9·81	2,727	7·65	6,518	8·77
1909-1913	5,054	11·47	3,633	9·04	8,687	10·31
1914-1918	5,950	12·26	4,168	8·97	10,118	10·65
1919-1923	6,901	12·85	5,384	10·42	12,285	11·66
1924-1928	9,360	15·61	7,377	12·81	16,737	14·24
1929-1933	12,070	18·59	9,245	14·72	21,315	16·69
1932	2,630	20·09	1,957	15·40	4,587	17·78
1933	2,861	21·68	2,156	16·81	5,017	19·28
1934	3,147	23·67	2,257	17·44	5,404	20·60
1935	3,435	25·65	2,456	18·80	5,891	22·27
1936	3,386	25·10	2,443	18·52	5,829	21·85

Part of the increase in 1931 and subsequent years was due to the inclusion of deaths from diseases of the coronary arteries, but even if these be excluded the total rate shows a steady increase up to 1935, being respectively 15.42, 16.69, 17.62, 18.54, and 19.50. In 1936 it dropped to 18.47.

The ages of persons who died from diseases of the heart during 1936 ranged between 2 years and 102 years, but 94 per cent. were 45 years or over.

In the following table are shown the death-rates for each sex in the principal age groups during the triennial period around each census since 1891:—

Age Group (Years).	Death Rate per 10,000 Living—Diseases of the Heart.				
	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Males.					
0-4 ... ..	·75	1·96	·92	·49	·17
5-9 ... ..	·91	1·05	1·22	·90	·60
10-14 ... ..	1·59	1·61	1·56	1·43	·74
15-19 ... ..	2·07	1·82	2·23	1·49	1·21
20-24 ... ..	2·11	1·73	1·90	1·71	1·17
25-34 ... ..	3·21	2·14	2·84	2·80	1·70
35-44 ... ..	7·44	5·70	5·97	5·30	5·62
45-54 ... ..	15·96	13·45	15·03	13·48	19·19
55-64 ... ..	40·05	31·61	39·92	38·61	58·52
65-74 ... ..	77·02	77·12	105·21	107·23	160·11
75 and over ... ..	101·80	123·89	228·18	293·63	433·83
All Ages ... ..	7·78	8·10	11·73	12·78	21·82
Rate in 1890-92 = 100...	100	104	151	164	280
Females.					
0-4 ... ..	·65	1·55	·70	·51	·30
5-9 ... ..	1·16	·77	·75	1·33	·56
10-14 ... ..	·76	1·61	2·06	1·47	·81
15-19 ... ..	1·52	1·63	2·10	1·60	1·21
20-24 ... ..	2·05	1·63	2·25	1·45	1·33
25-34 ... ..	3·48	2·57	2·75	2·21	1·98
35-44 ... ..	7·29	5·63	5·77	5·17	4·55
45-54 ... ..	11·46	10·88	13·67	10·24	11·90
55-64 ... ..	26·57	25·48	31·53	29·86	33·93
65-74 ... ..	62·78	61·41	94·64	88·82	118·67
75 and over ... ..	91·86	104·09	190·99	248·91	367·98
All Ages ... ..	5·29	5·92	9·33	10·10	16·56
Rate in 1890-92 = 100...	100	112	176	191	313
Persons.					
0-4 ... ..	·70	1·76	·81	·50	·23
5-9 ... ..	1·03	·91	·99	1·11	·58
10-14 ... ..	1·18	1·61	1·81	1·45	·77
15-19 ... ..	1·79	1·73	2·17	1·55	1·21
20-24 ... ..	2·08	1·68	2·07	1·58	1·25
25-34 ... ..	3·33	2·35	2·80	2·51	1·84
35-44 ... ..	7·38	5·67	5·88	5·24	5·08
45-54 ... ..	14·16	12·37	14·43	11·95	15·66
55-64 ... ..	34·84	28·97	36·25	34·62	46·41
65-74 ... ..	71·11	70·70	100·43	98·68	139·92
75 and over ... ..	97·82	115·04	211·48	271·51	400·22
All Ages ... ..	6·64	7·07	10·59	11·47	19·23
Rate in 1890-92 = 100...	100	106	159	173	290

Although the rate for all ages has increased nearly threefold during the period reviewed, the increase is confined to ages 45 and over, due to causes explained on page 419. The rates in all groups below 45 years have declined since 1890.

Under the age of 35 there is very little difference between the rates of males and of females, but thereafter the male rate is distinctly higher, the result, no doubt, of the more strenuous life of males than of females.

*Bronchitis.*

Bronchitis caused 251 deaths during 1936, equal to a rate of 0.94 per 10,000 living. Of the total, 148 were males and 103 females, the corresponding rates per 10,000 of each sex being 1.10 and 0.78. The rate for the State was 24 per cent. lower than that experienced during the previous five years. Deaths in the metropolis numbered 106, and there were 145 in other parts of the State. The corresponding rates were 0.84 and 1.03 per 10,000 living. Of the total deaths, 69 were caused by acute bronchitis, 117 cases were shown as being due to the disease in its chronic form, and 65 were unspecified. Of those persons who died of acute bronchitis, 13 per cent. were under 1 year of age, and 75 per cent. were 55 years or over, whilst 85 per cent. of those who succumbed to chronic bronchitis were 55 years of age and over. Experience shows the disease to be most prevalent during the months of June, July, August and September.

*Pneumonia.*

Pneumonia, including broncho-pneumonia, was the cause of 1,734 deaths during 1936, the equivalent rate per 10,000 living being 6.50, which was 16 per cent. above the average for the preceding quinquennium. Of the total 997 were males and 737 females. The male and female rates per 10,000 living were 7.39 and 5.59 respectively. The deaths in the metropolis numbered 787, and those in the remainder of the State 947, the rates being 6.25 and 6.72 per 10,000 living respectively. An analysis of the deaths according to age shows that pneumonia is most destructive in its attacks on children under 5 years of age and adults who have passed the age of 55. The rate of mortality from pneumonia is lowest among children between 10 and 14 years of age, then it increases with advancing age.

Of the persons who died from pneumonia during 1936, 22 per cent. were under 5 years of age and 54 per cent. 50 years of age and over. The following table gives deaths and rates, according to sex, since the year 1884:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	2,032	7.68	1,301	5.98	3,333	6.91
1889-93	2,158	7.00	1,373	5.26	3,531	6.21
1894-98	2,514	7.43	1,528	5.15	4,042	6.37
1899-1903	3,191	8.87	2,000	6.15	5,191	7.58
1904-1908	2,816	7.28	1,824	5.12	4,640	6.24
1909-1913	2,983	6.77	1,931	4.81	4,914	5.83
1914-1918	3,779	7.78	2,402	5.17	6,181	6.50
1919-1923	4,217	7.85	3,042	5.89	7,259	6.89
1924-1928	4,810	8.02	3,498	6.08	8,308	7.07
1929-1933	4,318	6.65	3,205	5.10	7,523	5.89
1932	720	5.50	519	4.08	1,239	4.80
1933	802	6.08	593	4.62	1,395	5.36
1934	863	6.49	669	5.17	1,532	5.84
1935	999	7.46	713	5.46	1,712	6.47
1936	997	7.39	737	5.59	1,734	6.50

The greatest mortality from pneumonia occurs in the cold weather and early spring.

The following table shows the death-rates for each sex in the principal age groups, during the triennial period around each census since 1891:—

Age Group (Years).	Death Rate per 10,000 Living—Pneumonia.				
	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Males.					
0-4 ... ..	18.14	24.18	19.69	21.12	15.42
5-9 ... ..	1.22	1.64	1.41	1.60	1.12
10-14 ... ..	.69	.80	.78	.83	.53
15-19 ... ..	2.55	3.49	1.25	1.79	1.02
20-24 ... ..	3.02	5.25	2.46	2.30	1.20
25-34 ... ..	3.77	6.09	3.03	2.94	1.42
35-44 ... ..	7.49	8.27	4.99	5.07	2.96
45-54 ... ..	10.86	13.01	8.16	8.52	5.65
55-64 ... ..	16.71	22.60	11.94	13.07	11.31
65-74 ... ..	26.76	36.90	24.99	28.61	23.68
75 and over ... ..	26.50	57.50	43.45	58.36	72.41
All Ages ... ..	7.22	9.78	6.85	7.55	6.03
Rate in 1890-92 = 100...	100	135	95	105	84
Females.					
0-4 ... ..	15.64	20.66	17.88	17.60	12.50
5-9 ... ..	1.07	1.09	1.14	1.35	.99
10-14 ... ..	.70	1.61	.92	.88	.86
15-19 ... ..	1.88	2.15	.61	1.30	.96
20-24 ... ..	2.23	2.80	1.03	1.30	1.12
25-34 ... ..	3.48	3.66	1.46	2.34	1.42
35-44 ... ..	4.88	5.89	2.68	2.87	2.37
45-54 ... ..	7.61	5.63	3.10	3.93	3.72
55-64 ... ..	9.81	15.07	8.08	7.66	6.15
65-74 ... ..	21.18	25.34	14.69	21.27	18.41
75 and over ... ..	19.83	48.49	44.10	65.22	55.69
All Ages ... ..	5.46	6.62	4.74	5.52	4.63
Rate in 1890-92 = 100...	100	121	87	101	85
Persons.					
0-4 ... ..	16.91	22.45	18.80	19.39	13.99
5-9 ... ..	1.15	1.37	1.28	1.48	1.06
10-14 ... ..	.70	1.20	.85	.86	.69
15-19 ... ..	2.22	2.82	.93	1.55	.99
20-24 ... ..	2.64	4.01	1.76	1.79	1.16
25-34 ... ..	3.65	4.91	2.27	2.64	1.42
35-44 ... ..	6.42	7.23	3.91	4.01	2.66
45-54 ... ..	9.56	9.89	5.94	6.35	4.71
55-64 ... ..	14.05	19.37	10.25	10.60	8.77
65-74 ... ..	24.45	32.13	20.33	25.21	21.11
75 and over ... ..	23.83	53.47	43.74	61.76	63.88
All Ages ... ..	6.41	8.28	5.84	6.56	5.34
Rate in 1890-92 = 100...	100	129	91	102	83

The male death rate is higher than the female rate at all ages excepting 10-14 years. The rates have fluctuated, but show a general decline of about 17 per cent. over the period under review, and the fall is apparent at all ages, except 75 and over. This increase is due probably to more information being available as to cause of death.

*Diseases of the Digestive System.*

Diseases of the digestive system caused the deaths of 756 males and 550 females during 1936, the respective rates per 10,000 living being 5.60 and 4.17. The rate corresponding to the total deaths from these diseases in the State was 4.90 per 10,000 living, and was 3 per cent. lower than that experienced during the previous five years. Deaths resulting from diseases of the digestive system are caused in the main by diarrhœa and enteritis, appendicitis, hernia and intestinal obstruction, ulcer of the stomach or duodenum, diseases of the gall bladder and ducts, and cirrhosis of the liver.

*Diarrhœa and Enteritis.*

The incidence of these diseases is mainly upon young children, the deaths under 1 year of age from these causes in 1936 being 110—59 males and 51 females. In 1936 there were 256 deaths from these causes at all ages, equivalent to a rate of 0.96 per 10,000 of the general population, the rate for males being 0.94 and for females 0.98. The combined rate was 13 per cent. below the average for the preceding quinquennium. The following table shows the number of deaths and the rates since 1884, distinguishing between the sexes:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	3,412	12.89	3,048	14.02	6,460	13.40
1889-93	3,451	11.20	2,851	10.92	6,302	11.07
1894-98	4,042	11.94	3,638	12.26	7,680	12.09
1899-1903	4,422	12.29	3,901	11.99	8,323	12.15
1904-1908	3,714	9.61	3,000	8.41	6,714	9.03
1909-1913	4,257	9.66	3,471	8.64	7,728	9.18
1914-1918	3,622	7.46	2,957	6.36	6,579	6.92
1919-1923	3,813	7.10	3,039	5.88	6,852	6.50
1924-1928	2,436	4.06	2,036	3.54	4,472	3.81
1929-1933	1,353	2.08	998	1.59	2,351	1.84
1932	182	1.39	139	1.09	321	1.24
1933	151	1.14	99	0.77	250	0.96
1934	121	0.91	117	0.90	238	0.91
1935	119	0.89	95	0.73	214	0.81
1936	127	0.94	129	0.98	256	0.96

There was a considerable drop in the rate after 1888, due probably to the beneficial operation of the Dairies Supervision Act. During the next fifteen years there was a gradual increase, followed by a marked improvement in 1904. The improvement was maintained consistently until the years 1919 and 1920, when an upward tendency was manifested. During the last thirteen years the general trend has been downward, though the

rate has fluctuated. The unusually low mortality in recent years is probably due in a large measure to the work of the Baby Health Centres previously mentioned and to favourable seasonal conditions.

Of the total deaths from diarrhoea and enteritis during 1936, 97 or 38 per cent., occurred in the months of January, February, and March; and 30 or 12 per cent. in the months of June, July and August. The mortality from these causes has been reduced to very small proportions relative to earlier years and the disease does not constitute the dreaded summer menace that it once was.

Deaths from these diseases are classified into two groups, one including children under 2 years of age, and the other all persons 2 years of age and over. In the first group there were 150 deaths, or 59 per cent. of the total, and in the second 106. Additional particulars are shown on page 401.

Since such a large proportion of the deaths is contained in this first group, it is interesting to consider the improvement in the rate shown by the following table, in which the deaths of children under 2 years from diarrhoea and enteritis are related to the total number of children in that age group:—

Year.	No.	Rate per 1,000 Living.	Year.	No.	Rate per 1,000 Living.
1881	733	33·50	1932	184	2·02
1891	685	14·76	1933	139	1·60
1901	1,165	18·10	1934	138	1·64
1911	963	11·21	1935	127	1·52
1921	988	10·08	1936	150	1·76

Although the rate of mortality from these causes is still comparatively heavy, there has been a very marked improvement. The death rate of children under 2 years per 1,000 living at those ages in 1936 was one-twentieth of the rate in 1881.

#### *Appendicitis.*

To this cause 227 deaths were ascribed in 1936, the rate being 0.85 per 10,000 living, which is 2 per cent. below the average of the preceding quinquennium. Appendicitis is more fatal to males than to females, the rate for the former in 1936 being 1.12, and for the latter 0.58 per 10,000 living.

#### *Cirrhosis of the Liver.*

Information relating to mortality from cirrhosis of the liver is of interest in connection with alcoholism.

Deaths from cirrhosis of the liver in 1936 numbered 111—75 males and 36 females, the rate being 0.42 per 10,000 living—16 per cent. above the average for the previous quinquennial period. This disease is more prevalent among males than females—the rate for the former in 1936 being 0.56 and for the latter 0.27 per 10,000 living of each sex.

*Bright's Disease or Nephritis.*

Bright's disease or nephritis has grown from a comparatively infrequent cause to a prominent position among the major causes of death whose incidence falls upon the general population. From 1884 to 1913 the number of deaths due to the disease gradually increased, and the rate of mortality more than doubled. A check in the increase then set in, and was followed after 1918 by an appreciable decrease, and the average annual rate for the next five years fell to 456 per million inhabitants as against 501 in 1914-18. From 1928 onwards, however, the rates exceed 500, reaching a maximum figure of 584 per million in 1934, but showing a slight decline to 581 per million in 1935, and 1936.

During 1936 there were 1,953 deaths due to diseases of the genito-urinary system, of which 1,549 were caused by all forms of nephritis. The rate was 5.81 per 10,000 living, and for males and females 6.60 and 5.00 respectively, the general rate being approximately 6 per cent. above that experienced during the previous quinquennium. The deaths due to these diseases in the metropolis were 797, and in the rest of the State 752, the corresponding rates per 10,000 living being 6.33 and 5.34. Experience shows that the fatality of these diseases increases slightly during the winter months.

The number of deaths and the rates of mortality due to Bright's disease are shown below.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	626	2.37	386	1.78	1,012	2.10
1889-93	907	2.94	570	2.18	1,477	2.60
1894-98	1,291	3.81	821	2.77	2,112	3.33
1899-1903	1,659	4.61	996	3.06	2,655	3.88
1904-1908	2,056	5.32	1,199	3.36	3,255	4.38
1909-1913	2,649	6.01	1,539	3.83	4,188	4.97
1914-1918	3,080	6.34	1,682	3.62	4,762	5.01
1919-1923	2,914	5.43	1,886	3.65	4,800	4.56
1924-1928	3,391	5.66	2,324	4.04	5,715	4.86
1929-1933	3,841	5.92	2,902	4.62	6,743	5.28
1932	783	5.98	588	4.63	1,371	5.31
1933	809	6.13	585	4.56	1,394	5.36
1934	839	6.31	692	5.35	1,531	5.84
1935	886	6.61	652	4.99	1,538	5.81
1936	890	6.60	659	5.00	1,549	5.81

During the period covered by the foregoing table the rate of mortality both for males and females has more than doubled. The rate for males in the last five years was 29 per cent. higher than that for females. Comparatively few persons under 35 years of age die from nephritis, the proportion in 1936 being 6.9 per cent. of the total.

The following table shows the death rates for each sex in the principal age groups during the triennial period around each census since 1891:—

Age Group (Years).	Death Rate per 10,000 Living.—Nephritis.				
	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Males.					
0- 4 ... ..	1.30	2.00	.99	.71	.57
5- 9 ... ..	.59	.23	.42	.31	.29
10-14 ... ..	.11	.28	.37	.51	.18
15-19 ... ..	.67	.75	.78	.63	.38
20-24 ... ..	.74	.89	1.34	1.11	1.00
25-34 ... ..	1.44	2.11	1.78	1.36	1.19
35-44 ... ..	4.22	4.49	4.13	3.00	2.96
45-54 ... ..	5.83	9.45	10.76	8.96	7.54
55-64 ... ..	11.67	19.09	24.16	20.16	15.32
65-74 ... ..	22.12	35.96	47.60	39.55	38.30
75 and over ... ..	17.43	40.77	71.58	73.99	104.24
All Ages ... ..	2.77	4.57	5.98	5.42	6.14
Rate in 1890-92 = 100...	100	165	216	196	222

Females.					
0- 4 ... ..	1.34	1.13	.93	.51	.47
5- 9 ... ..	.60	.28	.35	.35	.30
10-14 ... ..	.22	.33	.42	.59	.32
15-19 ... ..	.67	.61	.61	.57	.58
20-24 ... ..	1.30	1.22	1.54	1.12	.97
25-34 ... ..	1.90	1.90	1.46	1.66	1.37
35-44 ... ..	4.01	4.44	3.72	3.06	3.36
45-54 ... ..	5.53	7.84	8.29	6.38	5.92
55-64 ... ..	7.85	11.60	15.55	11.15	11.02
65-74 ... ..	16.18	22.83	31.35	25.99	29.29
75 and over ... ..	9.39	30.39	41.04	49.25	70.06
All Ages ... ..	2.17	3.01	3.87	3.63	4.85
Rate in 1890-92 = 100...	100	139	178	167	224

Persons.					
0- 4 ... ..	1.32	1.57	.96	.61	.52
5- 9 ... ..	.60	.26	.39	.33	.29
10-14 ... ..	.16	.31	.39	.55	.25
15-19 ... ..	.67	.68	.70	.60	.48
20-24 ... ..	1.01	1.06	1.44	1.11	.99
25-34 ... ..	1.64	2.01	1.62	1.51	1.28
35-44 ... ..	4.14	4.47	3.94	3.03	3.16
45-54 ... ..	5.71	8.77	9.68	7.74	6.76
55-64 ... ..	10.19	15.87	20.39	16.05	13.20
65-74 ... ..	19.66	30.59	40.25	33.25	33.91
75 and over ... ..	14.21	36.13	57.86	61.76	86.80
All Ages ... ..	2.50	3.83	4.97	4.54	5.50
Rate in 1890-92 = 100...	100	153	199	182	220

Although the total rates show a decided increase during the period reviewed, it is only in the oldest group, 75 years and over, that the rate in 1932-34 was higher than twenty years earlier. For each sex the rate depends entirely upon the age; a slow increase is noted till the age of 45 is reached, after which the increase is rapid. From this age the rates for males show a marked excess over the rates for females.

#### *Deaths from Puerperal Causes.*

The word "puerperal" is used in the broadest sense and includes all deaths due to pregnancy, parturition, or diseases of the breast during lactation.

Details of the deaths due to puerperal causes according to age, duration of marriage, previous issue, cause, locality and conjugal condition are shown in the Statistical Register. In 1936 the deaths of 292 women were due to puerperal causes, viz., 260 married and 32 single women. Of the married mothers who died in 1936, 11, and of the single mothers, 13, died before reaching the age of 21 years; the ages at death of the married women ranged from 16 years to 47 years, and of single women from 17 years to 36 years. The age at marriage of mothers who died ranged from 16 to 44 years. In 21 cases the duration of marriage was 20 years or over, but 11 mothers died within a year of marriage. In 82 cases there was no previous issue and in 38 of these cases the death occurred within two years of marriage, while in one case 15 children survived the mother.

The incidence of deaths from puerperal causes falling only upon women of child-bearing ages, and mainly upon married women of these ages, the rates of mortality are not quoted as a proportion of general population, but have been related to the live births as being the nearest approach to the number of confinements. Whilst not perfectly accurate the method gives useful results where live births only are recorded.

As 1936, however, is the first full year for which stillbirths have been compulsorily registered, it is possible to calculate the rates for New South Wales for this year in two further ways giving a greater measure of accuracy. The deaths may be related to the live births and stillbirths combined or to the number of confinements calculated from such figure by allowing for plural births. These rates are shown on a later page, but are still not an absolutely accurate measure, because the deaths include women dying from conditions associated with abortion or miscarriage or dying in an undelivered state, whereas the number of non-fatal abortions, etc., are not recorded and cannot be estimated. This shortcoming, however, is general in the statistical records of all countries.

In order to preserve uniformity with former years and with other States and countries which adopt the same method, rates are still stated as per thousand live births. Such rates showed a persistent though fluctuating decline in the three decades 1895-1924. During the period 1895-1904 the annual average number of deaths of mothers in childbirth was 268, equal to 7.1 deaths per 1,000 live births. The corresponding number in the period 1905-1914 was 284, and the rate 6.2, compared with 289 and 5.2

respectively in the period 1915-1924. The lower proportion of unmarried mothers contributed slightly to this decline; but the rates quoted represent very closely the improvement that occurred in mortality in childbirth among married mothers. A comparison of deaths in childbirth in this State with those of other countries must be made with caution. Apart from possible differences in the method of calculating the rate (as indicated above) a further difference arises in the classification of criminal abortion (illegal operations). In the international list of causes of death these are classified with homicide. In the table given below deaths from this cause are included to show the total deaths incidental to childbirth, but the totals are also shown excluding criminal abortion to enable comparison to be made with other countries where these deaths are not included.

Causes:	Deaths, 1935.		Deaths, 1931-35.		Deaths, 1936.		Deaths, 1932-36.	
	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.
Accidents of Pregnancy ...	13	·29	107	·48	25	·54	108	·48
Puerperal Hæmorrhage ...	39	·87	172	·76	34	·74	173	·78
Puerperal Septicæmia ...	44	·99	184	·82	45	·98	188	·84
Post Abortive Septicæmia ...	28	·63	158	·70	37	·80	154	·69
Albuminuria and Eclampsia ...	60	1·34	289	1·29	51	1·10	287	1·29
Phlegmasia Alba Dolens, Embolus, Sudden Death.	21	·47	87	·39	21	·45	85	·38
Other Casualties of Childbirth	25	·56	128	·57	23	·50	123	·55
Total, excluding Illegal Operations.	230	5·15	1,125	5·01	236	5·11	1,118	5·01
Illegal Operations ...	52	1·16	230	1·02	56	1·21	241	1·08
Total ...	282	6·31	1,355	6·03	292	6·32	1,359	6·09

More than any other cause of death during childbirth, puerperal septicæmia can be classed as a preventable disease. Over 25 per cent. of the deaths are due to this cause, but the proportion has declined appreciably in recent years. The annual rates of mortality of mothers in childbirth per 1,000 live births in the last 10 years were as follow:—

Year.	Deaths from Puerperal Septicæmia per 1,000 Live Births.			Total Deaths of Mothers in Childbirth per 1,000 Live Births, including Illegal Operations.			Total Deaths of Mothers in Childbirth per 1,000 Live Births, excluding Illegal Operations.		
	Metropolis.	Remainder of State.	State.	Metropolis.	Remainder of State.	State.	Metropolis.	Remainder of State.	State.
1927	1·99	1·86	1·91	7·87	5·72	6·54	6·27	5·32	5·68
1928	2·03	1·75	1·86	6·29	5·77	5·97	5·20	5·50	5·39
1929	1·97	1·15	1·50	6·09	4·68	5·28	5·01	4·39	4·65
1930	2·01	1·19	1·53	6·06	5·66	5·83	5·15	4·87	4·99
1931	2·04	1·50	1·72	6·66	5·62	6·03	4·93	5·20	5·09
1932	1·71	1·06	1·31	7·79	5·09	6·14	5·80	4·54	5·03
1933	1·93	1·22	1·49	6·79	4·79	5·57	5·21	4·54	4·80
1934	1·63	1·34	1·45	7·01	5·49	6·07	5·02	4·89	4·94
1935	1·72	1·55	1·61	6·92	5·94	6·31	4·38	5·62	5·15
1936	2·25	1·48	1·78	7·43	5·63	6·32	5·80	4·68	5·11

Rates for the year 1936 calculated by the two additional methods mentioned earlier are shown in the following table:—

Cause of Death in Childbirth.	Deaths per 1,000 All Births (Live and Still).			Deaths per 1,000 Confinements.		
	Married.	Single.	Total.	Married.	Single.	Total.
Accidents of Pregnancy ... ..	·48	1·38	·53	·49	1·40	·53
Puerperal Hæmorrhage ... ..	·75	...	·71	·76	...	·72
Puerperal Septicæmia ... ..	·92	1·38	·95	·93	1·40	·96
Post Abortive Septicæmia ... ..	·73	1·83	·78	·73	1·86	·78
Albuminuria and Eclampsia ... ..	1·08	·92	1·07	1·09	·93	1·08
Phlegmasia Alba Dolens, Embolus, Sudden Death.	·44	·46	·44	·45	·47	·45
Other Casualties of Childbirth...	·46	·92	·48	·47	·93	·49
Total, excluding Illegal Operations	4·86	6·89	4·96	4·92	6·99	5·01
Illegal Operations ... ..	·86	7·81	1·17	·87	7·92	1·19
Total ... ..	5·72	14·70	6·13	5·79	14·91	6·20

The proportion of deaths due to each cause is shown below for 1936 in comparison with the previous five years. The average for the five years, 1932-36, is also shown.

Causes.	Proportion per cent. due to each Cause.								
	1931-35.			1936.			1932-36.		
	Mar- ried.	Single.	Total.	Mar- ried.	Single.	Total.	Mar- ried.	Single.	Total.
Accidents of Pregnancy ... ..	8·3	5·1	7·9	8·5	9·4	8·5	8·3	5·2	8·0
Puerperal Hæmorrhage ... ..	13·7	5·1	12·7	13·1	...	11·6	13·7	5·1	12·7
Puerperal Septicæmia ... ..	14·5	6·3	13·6	16·1	9·4	15·4	14·9	5·8	13·8
Post Abortive Septicæmia ... ..	11·3	14·5	11·7	12·7	12·5	12·7	11·2	12·8	11·3
Albuminuria and Eclampsia ... ..	21·6	19·0	21·3	18·8	6·2	17·5	21·6	17·3	21·1
Phlegmasia Alba Dolens, Embolus, Sudden Death.	7·0	1·9	6·4	7·7	3·1	7·2	6·8	1·9	6·3
Other Casualties of Child- birth.	10·5	1·9	9·4	8·1	6·3	7·9	10·0	1·9	9·1
Total, excluding Illegal Operations.	86·9	53·8	83·0	85·0	46·9	80·8	86·5	50·0	82·3
Illegal Operations ... ..	13·1	46·2	17·0	15·0	53·1	19·2	13·5	50·0	17·7
Total, including Illegal Operations.	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0

In the five years, 1932-36, illegal operations caused 50 per cent. of the puerperal deaths of single women.

### *Deaths from Violence.*

This category includes deaths from accident, suicide, homicide, and other deaths not classified, in respect of which "open verdicts" were recorded at coroners' inquests. The annual number of suicides has increased, but their proportion to the population has not shown any marked variation.

Deaths from homicide and those classed as "open verdicts" have remained fairly constant in number, and their proportion to the population has, therefore, decreased.

Deaths from violence in 1936 numbered 1,664, or 6.8 per cent. of the total deaths of the year. This number includes 291 suicides, 1,276 accidents, 37 homicides, and 60 "open verdicts." The rate, 6.24 per 10,000 living, was 7 per cent. above the rate for the preceding quinquennium, which was 5.81. In the year 1936 the males numbered 1,258 or 9.33 per 10,000 living, and the females 406 or 3.08 per 10,000, and 33 per cent. of the male rate.

#### *Deaths from Suicide.*

The number of persons who took their own lives in 1936 was 291 or a rate of 1.09 per 10,000 living, and about 9 per cent. below the average for the preceding quinquennium. The number of male suicides was 217, or a rate of 1.61 per 10,000 living, and of female 74, or a rate of 0.56 per 10,000 living—the male rate being almost three times that of the female.

The number of deaths from suicide and the rates since 1884 are shown in the following table:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	428	1.62	96	0.44	524	1.09
1889-93	519	1.68	110	0.42	629	1.11
1894-98	679	2.01	169	0.57	848	1.34
1899-1903	651	1.81	142	0.44	793	1.16
1904-1908	719	1.86	160	0.49	879	1.18
1909-1913	857	1.95	238	0.59	1,095	1.30
1914-1918	888	1.83	223	0.48	1,111	1.17
1919-1923	887	1.65	244	0.47	1,131	1.07
1924-1928	1,100	1.84	269	0.47	1,369	1.16
1929-1933	1,244	1.92	301	0.48	1,545	1.21
1932	220	1.68	59	0.46	279	1.08
1933	262	1.99	65	0.51	327	1.21
1934	263	1.98	86	0.66	349	1.33
1935	268	2.00	67	0.51	335	1.27
1936	217	1.61	74	0.56	291	1.09

The means usually adopted for self-destruction by men are either shooting, poisoning, cutting, or hanging. Women, as a general rule, avoid weapons, and resort mostly to poison. Of every 100 cases of suicide during the five years 1932-36, 27 were by the agency of poison, 25 by shooting, 13 by gas, 12 by cutting, 10 by hanging, and 6 by drowning. After 1921 when regulations regarding the possession of firearms were introduced the proportion of suicides by shooting decreased, but in recent years there has been a constant upward trend and the proportion is approaching the experience of the five years 1917-21 which was 28 per cent.

Experience indicates that the suicidal tendency is probably influenced by the seasons. During the last ten years, 1927-36, the proportion of male suicides per 1,000 was approximately as follows:—In spring, 258, summer 269, autumn 242 and winter 231. The number of suicides is usually greater in January and December than in any other month.

Female suicides, being numerically small, give variable results as regards seasonal influence, and, contrary to the experience of males, no particular month showed any preponderance.

*Deaths from Accident.*

During the year 1936 the number of fatal accidents was 1,276, viz., 972 of males and 304 of females, or equal to rates of 7.21 and 2.30 per 10,000 living of each sex, and the general rate was 4.78 per 10,000 living.

The number of deaths from accident and the rates since 1884 are shown in the table below:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	3,550	13.41	944	4.34	4,494	9.32
1889-93	3,666	11.90	966	3.70	4,632	8.14
1894-98	3,498	10.33	1,095	3.60	4,593	5.23
1899-1903	3,432	9.54	1,103	3.39	4,535	6.62
1904-1908	3,145	8.13	1,056	2.96	4,201	5.65
1909-1913	3,894	8.84	1,119	2.79	5,013	5.95
1914-1918	3,821	7.87	1,088	2.34	4,909	5.17
1919-1923	3,677	6.85	1,102	2.13	4,779	4.54
1924-1928	4,860	8.11	1,363	2.37	6,223	5.30
1929-1933	4,597	7.08	1,344	2.14	5,941	4.65
1932	823	6.29	277	2.18	1,100	4.26
1933	812	6.15	255	1.99	1,067	4.10
1934	801	6.03	247	1.91	1,048	3.99
1935	861	6.43	281	2.15	1,142	4.32
1936	972	7.21	304	2.30	1,276	4.78

NOTE:—In the years 1927 to 1930 inclusive “open verdicts” are included as accident.

These figures have been adjusted on the basis of the 1929 revision of the International List which came into use in 1931. They include inattention at birth, throughout and prior to 1896, injury at birth and traumatic tetanus. In the years 1927 to 1930 “open verdicts” are included as they cannot be separated in the classification.

Although the death-rate from accidents is still high compared with that of more closely settled countries, it has decreased, the rate for 1934 being the lowest on record.

The experience of the quinquennium ended 1936 shows that out of every 1,000 fatal accidents 383 are due to vehicles and horses, 91 to drowning, 155 to falls, 72 to burns or scalds, 69 to railway or tramway accidents, 23 to accidents in mines and quarries, and 16 were due to weather, *i.e.*, excessive cold or heat, and lightning.

Out of 540 deaths caused by accidents with vehicles and horses in 1936, 467 were due to accidents in which a motor vehicle was involved. The deaths due to this class of accident over the last nine years are shown in the following table:—

Year.	Average Number of Vehicles Registered.	Persons Killed.			Death Rate per 1,000 Vehicles Registered.	Death Rate per million of Population.	Ages of Persons Killed.				
		Pedestrians.	Others.	Total.			Under 15.	15-30.	30-65.	65 & over.	N.S.
1928 ...	208,427	155	229	384	1.8	156	81	122	145	35	1
1929 ...	237,322	199	279	478	2.0	191	87	138	201	52	...
1930 ...	245,316	184	247	431	1.8	170	72	134	183	41	1
1931 ...	222,912	137	195	332	1.5	130	70	103	126	33	...
1932 ...	208,145	149	155	304	1.5	118	56	91	112	45	...
1933 ...	214,987	117	204	321	1.5	123	59	95	126	41	...
1934 ...	228,318	158	177	335	1.5	128	49	97	128	61	...
1935 ...	245,790	159	242	401	1.6	152	66	136	142	56	1
1936 ...	265,313	161	306	467	1.8	175	64	143	201	59	...

Accidents of this class became more numerous as the use of motor vehicles increased, and they diminished in 1931 and 1932 as motor transport declined. With the use of motor vehicles again increasing there has been a proportionate increase in the deaths.

In 1936 pedestrians killed represented 35 per cent. of the total.

#### THE SEASONAL PREVALENCE OF DISEASES.

The following table shows for each month of the year the proportion of deaths due to each of nine principal causes. The figures are based on the experience of the five years 1932-36, and in order to make the results of the computation comparable, adjustments have been made to correct the inequality of the number of days in each month:—

Month.	Typhoid Fever.	In- fluenza.	Diph- theria and Croup.	Whoop- ing- Cough.	Phthisis.	Pneu- monia.	Bron- chitis.	Diarrhœa, Enteritis, and Dysentery.	Bright's Disease.
January ...	143	25	78	88	86	57	59	153	74
February..	92	20	85	83	76	53	38	136	71
March ...	244	18	88	44	81	53	58	112	63
April ...	148	20	143	51	81	60	63	103	72
May ...	84	50	132	46	92	86	84	64	75
June ...	43	66	102	46	85	93	98	38	91
July ...	17	199	95	69	92	123	147	57	108
August ...	25	226	72	67	91	133	145	51	103
September.	17	169	52	132	85	112	107	65	96
October ...	42	113	57	149	80	87	79	61	85
November.	69	64	41	137	76	73	69	64	84
December .	76	30	55	88	75	65	53	96	78
	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

In interpreting the foregoing table comparison should be made vertically and not horizontally, the figures representing proportions per thousand and not absolute numbers.

The chief features of the foregoing table are exhibited in the contrast between the figures relating to typhoid fever, diarrhœa and enteritis on the one hand, and to influenza, pneumonia, and bronchitis on the other. In the first group the influence of the hot weather is the controlling factor; in the second, the cold. The warmest months in the year are January, February, and December; the coldest, June, July, and August. The morbidity from phthisis varies little throughout the year, but the rates show that it is more fatal in the colder months. Bright's disease shows likewise a higher mortality during the cold weather.

## FACTORIES

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THE manufacturing industries of New South Wales have expanded in a remarkable degree. Prior to the federation of the Australian States in 1901 comparatively few were concerned in the production of the higher classes of manufactures, notwithstanding the immense quantities of raw materials, such as wool, minerals, etc., readily available. The great majority of the establishments were engaged in the production for local use of food commodities, furniture and bricks; in making clothing from imported materials; in printing; in the repair rather than the manufacture of machinery; or in the preliminary treatment of primary products, such as wool-scouring or saw-milling.

After federation a uniform protective customs tariff replaced the duties imposed by the States on oversea and interstate goods and trade between the States became free. Then a period of steady expansion commenced. Economic conditions were especially favourable; the State was prosperous, primary production was increasing, and the population was being augmented by immigration as well as by natural increase. The outbreak of war, which occurred at a time when the primary industries were affected by adverse seasonal conditions, caused a measure of disorganisation in the factories. But the set-back was temporary, and recovery was rapid in consequence of the demand for products for war purposes and the increase in the spending power of the people by reason of the circulation of war moneys and the returns received from high-priced exports. Moreover, the curtailment or cessation of supplies of many imported articles caused greater attention to be directed towards local resources.

Under these conditions the manufacturing industries entered upon a more advanced stage of development. Iron and steel works, and many subsidiary industries were established, the manufacture of various classes of machinery was undertaken, large ocean steamers were built, and many other high-grade products were added to the list of commodities made in New South Wales.

In 1928-29 a record in manufacturing was attained. Thereafter a general decline set in, reaching lowest levels in 1931-32. An upward trend began in 1932-33 and gathered strength with progress towards recovery, so that practically all classes of industry had improved substantially by 1936 and many had expanded beyond predepression activity.

The customs tariff in Australia has been the means of encouraging the growth of local manufactures. There were numerous increases in the tariff between November, 1929, and July, 1931. Moreover, restrictions on the export of gold and a steep rise in the cost of exchange, Australia on London, discouraged importation, and gave a further measure of protection to local industries. On the other hand, a rapid decline in national income, together with increases in excise duties and the imposition of a sales tax on wholesale transactions in both imported and local commodities, caused a shrinkage in the demand for goods.

The Parliament of the Commonwealth raised the tariff again after the Ottawa agreement in July, 1932, and in order to accord the margins of preference in respect of British goods, as agreed, increased the duties on non-British imports. Subsequently local industries began to revive, and

it became practicable to reduce the tariff, as well as revenue duties, sales tax, etc. Nevertheless the combined effect of duties and exchange enhances the cost of importation and many oversea firms have commenced to manufacture in Australia.

The Commonwealth Statistician has calculated that the net customs revenue collected in Australia represented 20.5 per cent. of the total value of merchandise imported in 1928-29, and that it rose to 33 per cent. (including primage) in 1931-32. Then it declined to 29.8 per cent. in 1932-33 and 1933-34, and to 27.8 per cent. in 1934-35. The customs revenue (excluding primage) was 32.8 per cent. of the value of dutiable goods in 1928-29, 45.2 per cent. in 1931-32, 41.3 per cent. in 1933-34, and 38 per cent. in 1934-35.

In May, 1936, notable changes were made in the tariff with a view to an expansion of secondary industries in Australia and the diversion of a certain portion of the import trade in order to foster trade within the British Empire and reciprocity in the interchange of products. The metal and machinery industries, especially those concerned with the manufacture of motor chassis, were the principal manufacturing groups directly affected by the changes. The importation of motor chassis from countries other than the United Kingdom became subject to a licensing system and restricted to the same level as in the twelve months ended 30th April, 1936. Additional duty was imposed on motor chassis and parts, and from the proceeds a bounty is to be provided for motor engines of local manufacture. Certain other imports are subject to licensing unless produced in the British Empire. Though the main objective is reciprocity in trade, rather than protection of local manufacturing industries, these may benefit by the increased duties, or indirectly.

The Tariff Board investigates proposals for altering the tariff and for granting bounties, and takes into consideration the effect of tariff and customs laws and bounties on the industries of Australia.

#### SCIENTIFIC RESEARCH AND STANDARDISATION.

The Commonwealth Council of Scientific and Industrial Research, which became a permanent body in 1921, was re-organised in 1926 in terms of the Science and Industry Research Act, 1920-26. There is a central council, and a committee in each State to advise the Council as to the problems to be investigated. The Council consists of three members appointed by the Commonwealth Government, who form the executive committee, the chairman of each State committee, and other persons with scientific knowledge co-opted by the Council.

The Council is empowered to conduct scientific researches in connection with primary and secondary industries, to train research workers, to make grants in aid of scientific research, to test and standardise scientific apparatus, to conduct investigations in reference to standardisation of machinery and materials used in industry, and to establish a bureau of information relating to scientific and technical matters.

The council confines its activities for the most part to primary industries, and its assistance to secondary production is mainly in the form of technical and scientific information. Nevertheless many of its investigations have an important bearing upon the manufacturing industries. For instance the council has taken action to encourage the use of modern methods in the seasoning and the use of local timbers and has conducted investigations into the production of suitable tobacco leaf, the chilling of beef and the extraction of valuable minerals from complex ores.

The Standards Association of Australia, which is an amalgamation of the Australian Commonwealth Engineering Standards Association and the Australian Association of Simplified Practice, aims at the improvement of industry by preparing standards in connection with engineering structures and materials, seeking to promote their adoption, and co-ordinating efforts for their improvement. The Association receives financial support from the Commonwealth Government, and the Council of Scientific and Industrial Research is the means of liaison between it and that Government.

The Curator and staff of the State Technological Museum also are engaged in research and in disseminating technical and scientific information tending to promote the efficiency and extension of existing industries, and the establishment of undertakings for the manufacture of new products.

#### BOUNTIES.

The following were manufactured commodities for which producers in New South Wales received bounties provided by the Commonwealth for the encouragement of production and manufacturing in Australia during the last three years, viz.:—

Wire netting manufactured from materials produced in Australia—9s. 7d. per ton.

Traction engines.—According to capacity, £40–£90 per tractor.

Sulphur from Australian pyrites and other sulphide ores and concentrates—36s. per ton.

Fortified wine—Payable on export—1s. 4.8d. per gallon, reduced to 1s. 3d. per gallon as from 1st March, 1935.

The amounts paid to producers in New South Wales during three years ended 30th June, 1936, are shown below:—

Product.	1933-34.		1934-35.		1935-36.	
	Quantity on which Bounty was Paid.	Amount of Bounty.	Quantity on which Bounty was Paid.	Amount of Bounty.	Quantity on which Bounty was Paid.	Amount of Bounty.
Wire Netting ... ..ton	18,168	£ 8,705	20,654	£ 9,897	20,689	£ 9,913
Traction Engines ... ..No.	67	2,698	82	4,046	133	6,578
Sulphur ... ..ton	7,982	14,368	7,584	13,651	7,065	12,717
Fortified Wine ... ..gal.	75,260	5,268	49,761	3,232	43,959	2,748
Total New South Wales ...	...	31,039	...	30,826	...	31,956

Particulars of bounties on gold and on wheat are shown in the chapters of the volume relating to mining and agriculture respectively.

#### DEFINITIONS IN FACTORY STATISTICS.

The statistics relating to factories, as shown in this chapter, have been compiled from returns supplied annually by manufacturers in terms of the Census Act of 1901. A return must be supplied in respect of every factory where four or more persons are employed or where power is used—including educational or charitable institutions, reformatories and other public

institutions, except penitentiaries. Returns from bakeries were collected for the first time for the year 1927-28. Returns are not collected in respect of small-goods-making or farriery.

If a manufacturing business is conducted in conjunction with an importing or a retail business, particulars relating to the manufacturing section only are included in the statistics. Where two or more industries are conducted in the same establishment a separate return is obtained for each industry. If power from the same generating plant is used for more than one industry, the cost is distributed proportionately amongst such industries.

Manufacturers are requested to state in their returns particulars as to the number, age, wages, etc., of their employees, the value of premises and equipment, the power of machinery, the value, and, where practicable, the quantities of raw materials and fuel used and of their output.

The *value of the factory output* is the value of the goods manufactured or work done; it is based generally on the wholesale selling value at the factory (exclusive of cost of delivery). The *value of production* is the value added to raw materials by the processes of manufacture; it is calculated from the value of the output by deducting the cost of raw materials, containers and packing, power, fuel or light, water and lubricating oil used, tools replaced, and repairs to plant.

In process of manufacture many goods are treated in several industries, the output of one becoming the raw materials of another, so that such commodities are counted more than once in the aggregate value of output and of raw materials. Examples are raw sugar passing from the mills to the refinery, metals from the smelters which become raw materials in establishments concerned in the production of metal goods, and timber from the saw mills used in furniture factories and in joinery. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason the value of production, and not the value of the output, is used as a measure of activity in the manufacturing industries as a whole. There are some establishments where a separate department is organised for selling the products, and the value of the output, as recorded in the manufacturers returns, is the nominal value at which the goods are transferred from the factory to the sales branch. Information is not available to indicate the extent to which the recorded value of the output and the value of production are affected thereby, but it is known to be appreciable, especially in some industries such as rubber works. Being a constant practice, this does not greatly disturb the basis of comparisons one year with another, but it is important that it should be taken into account in analysing statistics of the manufacturing industries, *e.g.*, in calculating the proportion of the output which is represented by cost of raw materials or by wages, etc.

Factory statistics have been reviewed by various conferences of Australian statisticians held from time to time for the purpose of improving and standardising statistical methods. As a result, certain changes have been introduced which have a bearing upon the statistics of factories in New South Wales. For instance, by a change introduced in 1930-31, the value added by processes in the factory, and not the value of the goods manufactured, is treated as the value of the output in the case of

three industries, viz. (1) assembly of motors, machinery, etc., (2) chaff cutting, and (3) cold storage. Due mainly to this alteration in statistical method, the recorded value of materials used in these industries was reduced by about £6,000,000 in 1930-31 as compared with the preceding year, and the value of the output by approximately £7,500,000.

### CLASSIFICATION OF FACTORIES.

For statistical purposes a standard classification of the manufacturing industries was formulated at a conference of Australian statisticians in 1902 and revised at more recent conferences. This classification was used in the compilation of the statistics relating to factories in New South Wales until the year 1930-31, when the classification shown below was introduced.

The classes are as follow :—

#### CLASS I.—TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS.

Coke Works.  
Briquetting and Pulverised Coal.  
Carbide.  
Lime, Plaster and Asphalt.  
Marble, Slate, etc.  
Cement and Cement Goods.  
Other.

#### CLASS II.—BRICKS, POTTERY, GLASS, ETC.

Bricks and Tiles, Fire Bricks and Fire-clay Goods.  
Earthenware, China, Porcelain, Terra-cotta.  
Glass (other than Bottles).  
Glass Bottles.  
Modelling.  
Other.

#### CLASS III.—CHEMICALS, DYES, EXPLOSIVES, PAINT OILS, GREASE.

Chemicals, Drugs and Medicines.  
Explosives.  
White Lead, Paints and Varnish.  
Oils, Vegetable (including Oil Cake).  
Oils, Mineral.  
Oils, Animal (including Greases and Glue).  
Boiling Down, Tallow Refining, Bone Mills etc.  
Soap and Candles.  
Chemical Fertilisers.  
Inks, Polishes, etc.  
Matches.  
Other.

#### CLASS IV.—INDUSTRIAL METALS, MACHINES, IMPLEMENTS AND CONVEYANCES.

Smelting, Converting, Refining, and Rolling of  
Iron and Steel.  
Engineering (not Marine or Electrical).  
Extracting and Refining of other Metals and Alloys.  
Electrical Installations, Cables and Apparatus.  
Construction and Repair of Vehicles.  
Ship and Boat-building and Repairing, Marine  
Engineering.  
Cutlery and Small Tools (not Machine Tools).  
Agricultural Implements.  
Brass and Copper.  
Galvanised Iron-working and Tinsmithing.  
Wireworking (including Nails).  
Art Metal Works.  
Stoves and Ovens.  
Gas Fittings and Meters.  
Lead Mills.  
Sewing Machines.  
Lamps and Fittings.  
Arms.  
Wireless Apparatus.  
Other Metal Works.

#### CLASS V.—PRECIOUS METALS, JEWELLERY, PLATE.

Jewellery.  
Watches and Clocks.  
Gold, Silver and Electroplate.  
Other.

#### CLASS VI.—TEXTILES AND TEXTILE GOODS (NOT DRESS).

Cotton.  
Wool, Worsted and Shoddy.  
Hosiery and other Knitted Goods.  
Silk, Natural and Artificial.  
Rope and Cordage.  
Canvas Goods, Tents, Tarpaulins and Sallmaking.  
Bags and Sacks.  
Other.

#### CLASS VII.—SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR).

Furs, Skins, Leather.  
Saddlery, Harness, Bags, Trunks, and other Goods  
of Leather and Leather Substitutes (not  
Clothing or Footwear).  
Other.

#### CLASS VIII.—CLOTHING.

Tailoring and Slop Clothing (Makers' Material).  
Clothing—Waterproof and Oilskin.  
Dressmaking (Makers' Material).  
" (Customers' Material)  
Millinery (Makers' Material).  
" (Customers' Material).  
Shirts, Collars, and Underclothing (Makers' Mater-  
ial).  
Shirts, Collars, and Underclothing (Customers'  
Material).  
Stays and Corsets.  
Handkerchiefs, Ties and Scarves (Makers' Material)  
Handkerchiefs, Ties and Scarves (Customers' Mat-  
erial)  
Hats and Caps.  
Gloves.  
Boots and Shoes.  
Boot Repairing.  
Boot Accessories.  
Umbrellas and Walking Sticks.  
Dyeworks and Cleaning (including Renovating and  
Repairing).  
Other.

The classes—*continued*.

## CLASS IX.—FOOD, DRINK, AND TOBACCO.

Flour Milling.  
 Cereal Foods and Starch.  
 Cattle and Poultry Foods (not Oilcake).  
 Chaffcutting and Corn Crushing.  
 Bakeries (including Cakes and Pastry).  
 Biscuits.  
 Sugar Mills.  
 Sugar Refining.  
 Sugar Confectionery (including Chocolate).  
 Jam, Fruit and Vegetable Canning.  
 Pickles, Sauces and Vinegar.  
 Bacon Curing.  
 Butter and Cheese Factories, etc.  
 Margarine and Butterine.  
 Meat and Fish Preserving, Meat Extracts.  
 Cocoa.  
 Condiments, Coffee, Spices, etc.  
 Ice and Refrigerating.  
 Salt Refining.  
 Aerated Waters, Cordials, etc.  
 Breweries.  
 Distilleries.  
 Wine Making.  
 Cider and Perry Making.  
 Malting.  
 Bottling.  
 Tobacco, Cigars, Cigarettes, Snuff, etc.  
 Dried Fruits.  
 Ice-cream.  
 Sausage Skins.  
 Other.

## CLASS X.—WOOD WORKING AND BASKETWEAR.

Sawmills (Forest).  
 " (Town).  
 Plywood Mills.  
 Bark Mills.  
 Joinery.  
 Coopers.  
 Boxes and Cases.  
 Wood Turning, Wood Carving, etc.  
 Basketware and Wickerware, including Scragrass  
 and Bamboo Furniture.  
 Perambulators.  
 Other.

## CLASS XI.—FURNITURE, BEDDING, ETC.

Billiard Tables, Cabinet and Furniture Making and  
 Upholstery.  
 Bedding and Mattresses.  
 Furnishing Drapery, etc.  
 Picture Frames.  
 Window Blinds, Verandah Blinds.  
 Other.

CLASS XII.—PAPER, STATIONERY, PRINTING,  
BOOKBINDING, ETC.

Papermaking, etc.  
 Envelopes, Stationery, Paper Boxes, Bags, etc.  
 Pencils, Penholders, etc.  
 Newspapers and Periodicals.  
 General Printing and Bookbinding (including  
 Account Books and Diaries).  
 Die-sinking and Engraving.  
 Electrotyping and Stereotyping.  
 Photo. Engraving, Lithography and Photo.  
 Lithography.  
 Other.

## CLASS XIII.—RUBBER.

Rubber Boots and Shoes.  
 Tyres, Motor and Cycle.  
 Other Rubber Goods (not Clothing or Belting).

## CLASS XIV.—MUSICAL INSTRUMENTS.

Gramophones.  
 Gramophone Records.  
 Planos, Piano-players, Organs.  
 Other.

## CLASS XV.—MISCELLANEOUS PRODUCTS.

Linoleum, Leather Cloth, Oil Cloth, etc.  
 Bone, Horn, Ivory and Tortoiseshell.  
 Celluloid and Similar Composition.  
 Buttons.  
 Ornamental Feather Dressing, Cleaning and Dyeing.  
 Brooms and Brushes.  
 Surgical, Optical, and other Scientific Instruments  
 (not Electrical).  
 Toys, Games, and Sports Requisites.  
 Artificial Flowers.  
 Other.

## CLASS XVI.—HEAT, LIGHT, AND POWER.

Electric Light and Power.  
 Gas Works.  
 Hydraulic Power.  
 Other.

## PROGRESS OF FACTORIES SINCE 1901.

The statistics published in this chapter are not a complete record of either the income or expenditure of the undertakings concerned, and are not intended to show their financial position collectively or individually.

Moreover they relate only to the establishments which may be included in the definition of a factory as shown on page 435, and this definition does not embrace many establishments which fall within the scope of the factory inspection laws and other administrative measures which are described in other chapters of this Year Book. Comparisons as to value of materials, output, and production are affected by factors noted under the heading of "Definitions" on page 435.

The following summary indicates the progress of the factories in New South Wales since 1901:—

Year.	Establishments.	Employees.*	Horsepower of Machinery in use. (a)	Value of Land, Buildings and Plant.	Salaries and Wages.	Value of Materials and Fuel used.	Value of Output.	Value of Production, i.e., added to Raw Materials.
	No.	No.	H.p.	£(000)	£(000)	£(000)	£(000)	£(000)
1901 ...	3,367	61,764†	44,595	13,699	4,945	15,637	25,648	10,011
1911 ...	5,039	104,551†	148,218	25,651	10,048	34,914	54,346	19,432
1920-21 ...	5,837	139,211	312,309	59,544	25,619	94,713	137,841	43,128
1925-26 ...	8,196	169,774	503,939	89,949	33,567	105,125	169,963	64,838
1928-29 ...	8,465	180,756	648,450	102,741	38,545	111,671	185,298	73,627
1929-30 ...	8,208	162,913	782,526	107,301	34,876	100,493	167,251	66,848
1930-31 ...	7,544	127,605	749,016	100,688	25,200	68,960	118,484	49,524
1931-32 ...	7,397	126,355	720,800	96,741	22,751	67,786	114,439	46,653
1932-33 ...	7,444	138,504	725,238	95,777	23,783	74,877	124,446	49,569
1933-34 ...	7,818	153,999	869,009	95,395	25,749	82,570	136,612	54,042
1934-35 ...	8,254	175,033	925,824	98,391	29,513	93,093	154,433	61,430
1935-36 ...	8,486	193,200	1,017,533	101,459	33,315	105,224	174,694	69,470
Average per factory.				Average per employee.				
	No.	H.p.	£	£	£	£	£	£
1901 ...	...	18.3	13.2	4,069	80	253	415	162
1911 ...	...	20.7	29.4	5,090	100	334	520	186
1920-21 ...	...	23.8	53.5	10,201	190	680	990	310
1928-29 ...	...	21.4	76.6	12,137	221	618	1,025	407
1930-31 ...	...	16.9	99.2	13,347	207	540	928	388
1935-36 ...	...	22.8	119.9	11,956	179	545	904	359

\*Average number during whole year (see page 446). † Estimated. (a) Gross, including electricity.

The increase in the number of factories since 1920-21 has not been so great as the figures indicate, insofar as a more extensive use of electrically driven machinery of small horse-power in bakeries, bootmaking, and boot-repairing workshops, motor garages, etc., has brought numerous small establishments within the definition of "factory." This has affected, though not in the same degree, the number of employees and the value of the output.

The year 1928-29 marked the peak of factory production in New South Wales. In comparison with the year 1920-21 the number of factories in that year showed an increase of 45 per cent., and the value of land, buildings, plant and machinery an increase of 73 per cent. The average number of employees was greater by 30 per cent., the wages bill by 50 per cent., and the recorded value of the output by 34 per cent.

Between 1928-29 and 1931-32 there was a decline of  $12\frac{1}{2}$  per cent. in the number of factories, 30 per cent. in the average number of employees, 41 per cent. in wages, and 38 per cent. in the recorded value of output.

Between 1931-32 and 1935-36 there was an increase of nearly 15 per cent. in the number of factories, 53 per cent. in the number of employees and 55 per cent. in the value of materials and fuel used, 46 per cent. in the salary and wages bill, and 53 per cent. in the value of output.

The number of factories in 1935-36 was slightly greater than in 1928-29; the number of employees, 7 per cent. greater; the wages bill was  $13\frac{1}{2}$  per cent. less; and the value of output nearly 7 per cent. less.

#### GOVERNMENT FACTORIES AND WORKSHOPS.

The foregoing statement includes particulars of a number of factories and workshops under Government control in New South Wales.

The results shown by Government establishments, however, are not comparable with those of other establishments, because in cases where the former are not conducted for profit the value of the output has been estimated by adding 10 per cent. to the value of materials and fuel used and other factory costs. It is to be noted that repair work constitutes a large proportion of the work done in these factories.

The following table shows the details of the operations of the establishments under the control of the State and Commonwealth Governments in 1935-36 separately from those conducted by private enterprise:—

Particulars.				Government Workshops, etc.	Other Establishments.	Total.
Number of Establishments* ... ..				69	8,417	8,486
Average Number of Employees.†	Male ... ..			14,574	129,506	144,080
	Female ... ..			388	52,666	53,054
	Total ... ..			14,962	182,172	197,134
Salaries and Wages paid to Employees.†	Male ... ..	£	3,218,992	25,357,210	28,576,202	
	Female ... ..	£	42,190	4,696,142	4,738,332	
	Total ... ..	£	3,261,182	30,053,352	33,314,534	
Capital Value of Land, Buildings, and Fixtures £				5,567,769	43,926,453	49,494,222
Value of Plant and Machinery ... ..				£ 6,550,581	45,414,401	51,964,982
Machinery—Average Horse-power in use... h.p.				267,686	749,847	1,017,533
Value of Materials and Fuel used ... ..				£ 3,093,762	102,130,044	105,223,806
Total Value of Output ... ..				£ 7,659,140	167,034,621	174,693,761
Value of Production ... ..				£ 4,565,378	64,904,577	69,469,955

\* Each railway workshop is counted as a separate establishment. † Excluding drawings of working proprietors. ‡ Average number during period of operation (see page 446).

The Government establishments included railway and tramway workshops, electric light and power works, printing works, abattoirs, dockyards, and factories for the production of small arms, clothing and school furniture. Gas works and electricity undertakings of the local governing bodies are not included with the Government establishments.

# **FACTORIES.**

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## FACTORIES ACCORDING TO CLASS OF INDUSTRY.

The following table summarises the operations of the factories in New South Wales and in the metropolitan district during the year 1935-36, according to the class of industry. For an explanation of the terms used, e.g., value of output, value of production, see page 435.

Class of Industry.	Establishments.	Average Number of Employees.*			Salaries and Wages, exclusive of Drawings of Working Proprietors.	Value of Materials and Fuel Used.	Value of Goods Manufactured or Work done.	Value of Production, being Value added to Raw Materials.
		Males.	Females	Total.				
NEW SOUTH WALES.								
Treatment of Non-metalliferous Mine and Quarry Products	160	3,250	53	3,303	£(000) 724	£(000) 2,033	£(000) 3,712	£(000) 1,679
Bricks, Pottery, Glass	207	6,351	272	6,623	1,191	1,165	3,324	2,159
Chemicals, Paint, Oil, Grease	248	4,477	2,138	6,615	1,226	6,574	11,930	5,356
Industrial Metals, Machines, Conveyances	2,298	62,856	3,421	66,277	13,174	35,636	57,777	22,141
Precious Metals, Jewellery	74	726	119	845	135	140	370	230
Textiles and Textile Goods (not dress)	151	5,274	8,371	13,645	1,741	5,120	8,315	3,195
Skins, Leather (not clothing or footwear)	208	3,297	782	4,079	680	4,114	5,403	1,289
Clothing	1,511	7,542	21,035	28,577	3,010	5,670	10,519	4,849
Food, Drink, Tobacco	1,403	16,267	8,222	24,489	4,454	29,973	42,792	12,819
Wood Working, Basket Ware	834	8,446	292	8,738	1,468	3,951	6,340	2,389
Furniture, Bedding	320	4,554	1,028	5,582	912	1,950	3,391	1,441
Paper, Printing	660	10,279	4,690	14,969	2,767	3,847	9,012	5,165
Rubber	98	2,018	616	2,634	534	1,698	2,457	759
Musical Instruments	10	194	89	283	43	41	127	86
Miscellaneous Products	136	2,109	1,140	3,249	419	879	1,792	913
Heat, Light, Power	168	3,256	36	3,292	837	2,433	7,433	5,000
Total ... ..	8,486	140,896	52,304	193,200	33,315	105,224	174,694	69,470
METROPOLITAN DISTRICT.								
Treatment of Non-metalliferous Mine and Quarry Products...	92	1,595	41	1,636	310	556	1,081	525
Bricks, Pottery, Glass	101	5,073	252	5,325	964	973	2,751	1,778
Chemicals, Paint, Oil, Grease...	226	4,007	2,112	6,119	1,118	6,111	11,163	5,052
Industrial Metals, Machines, Conveyances	1,337	45,057	3,070	48,127	9,050	14,619	28,156	13,537
Precious Metals, Jewellery	72	716	119	835	134	140	368	228
Textiles and Textile Goods (not dress)	137	4,654	7,328	11,982	1,532	4,516	7,332	2,816
Skins, Leather (not clothing or footwear)	172	3,098	768	3,866	647	3,885	5,102	1,217
Clothing	1,249	6,927	20,298	27,225	2,899	5,476	10,097	4,621
Food, Drink, Tobacco	726	11,454	7,180	18,934	3,341	19,677	30,164	10,487
Wood Working, Basket Ware	334	4,514	186	4,700	823	2,476	3,878	1,402
Furniture, Bedding	281	4,377	1,010	5,387	883	1,887	3,279	1,392
Paper, Printing	457	8,941	4,428	13,369	2,469	3,673	8,373	4,700
Rubber	41	1,860	607	2,467	516	1,065	2,385	720
Musical Instruments	9	190	89	279	42	41	126	85
Miscellaneous Products	129	2,086	1,139	3,225	416	873	1,781	908
Heat, Light, Power	24	2,056	9	2,065	494	1,727	5,647	3,920
Total ... ..	5,387	106,605	48,936	155,541	25,638	68,295	121,683	53,388

\* Average during the whole year (see page 446).

The most important group of secondary industries in the State consists of metal and machinery works, in which the number of employees, the amount of salaries and wages, the value of raw materials and fuel used, of output, and of production are much greater than in any other group. The factories connected with food and drink, are as a group, second in importance, though the number of employees is less than in the clothing factories.

The value of the production in the two main groups of factories—metals and machinery and food and drink—represents half the total value of factory production, and the four groups—printing, chemicals, paints, etc., heat, light and power, and clothing—contribute in almost equal proportions one-third of the value.

## GEOGRAPHICAL DISTRIBUTION OF FACTORIES.

The number of factories in the more important classes and the average number of persons employed during the year 1935-36 in the divisions of the State are shown below:—

Division.	Bricks, Pottery, Glass.	Chemicals, Paint, Oil, Grease.	Industrial Metals.	Textiles.	Skins, Leather.	Clothing.	Food, Drink, &c.	Wood.	Furniture, &c.	Paper, Printing.	Heat, Light, Power.	Other Classes.	Total.
NUMBER OF ESTABLISHMENTS.													
Cumberland—													
Metropolis ... ..	101	226	1,337	137	172	1,249	726	334	281	457	24	343	5,387
Balance of ... ..	12	2	35	5	9	17	37	12	1	8	1	4	143
North Coast ... ..	3	...	112	...	...	14	91	110	5	17	14	15	384
Hunter and Manning...	19	11	187	3	4	78	128	94	22	33	17	32	628
South Coast ... ..	7	1	68	...	2	24	75	46	...	18	15	15	271
Tablelands—													
Northern ... ..	3	3	41	...	2	11	30	31	1	8	9	7	146
Central ... ..	15	1	81	3	1	30	65	20	3	16	15	15	265
Southern ... ..	5	1	46	1	2	12	30	12	1	9	8	11	138
Western Slopes—													
North ... ..	7	...	49	...	1	9	25	17	...	7	7	5	127
Central ... ..	4	1	67	...	1	12	24	10	...	11	9	6	145
South ... ..	19	1	106	2	2	28	61	37	1	27	11	14	300
Plains—													
Northern ... ..	1	...	32	...	3	5	16	24	2	8	5	3	90
Central ... ..	1	...	23	...	3	3	12	26	...	10	8	...	86
Riverina ... ..	9	...	85	...	2	14	47	53	...	21	17	7	255
Western Division ...	1	1	29	...	4	5	36	8	...	10	8	1	103
Total ... ..	207	248	2,298	151	208	1,511	1,403	834	320	660	168	478	8,486
AVERAGE NUMBER OF EMPLOYEES.*													
Cumberland—													
Metropolis ... ..	5,504	6,139	48,654	12,103	3,912	27,064	19,157	4,744	5,409	13,782	2,065	8,510	157,643
Balance of ... ..	337	31	452	832	87	42	268	121	1	46	3	13	2,233
North Coast ... ..	29	...	557	...	...	68	1,319	1,300	23	184	69	74	3,623
Hunter and Manning...	387	354	10,530	8	24	676	1,451	1,003	144	418	294	680	15,978
South Coast ... ..	195	76	3,609	...	12	63	381	336	...	86	216	388	5,362
Tablelands—													
Northern ... ..	25	13	173	...	11	77	141	163	2	60	48	20	733
Central ... ..	132	3	921	333	7	94	406	82	13	144	159	659	2,953
Southern ... ..	27	4	460	166	19	125	135	57	3	51	63	54	1,164
Western Slopes—													
North ... ..	54	...	246	...	5	21	173	81	...	84	44	24	732
Central ... ..	43	3	240	...	7	22	154	47	...	68	33	13	630
South ... ..	102	6	553	329	13	107	558	300	4	182	46	56	2,256
Plains—													
Northern ... ..	4	...	184	...	15	7	61	220	9	36	33	4	573
Central ... ..	4	...	73	...	24	7	25	177	...	39	35	...	384
Riverina ... ..	41	...	331	...	14	34	705	388	...	102	85	28	1,788
Western Division ...	2	8	528	...	23	28	204	63	...	102	117	7	1,082
Total ... ..	6,886	6,637	67,511	13,771	4,173	29,035	25,198	9,082	5,608	15,384	3,310	10,539	197,134

\* Average number during period of operation (see page 446).

More than 63 per cent. of the factories are situated in the metropolitan area, where the number in every group is greater than in any other division. Other important manufacturing centres are in proximity to the coal-fields, viz., at Newcastle in the Hunter and Manning division, and at Port Kembla in the South Coast division. In the western division the mining of the silver-lead deposits at Broken Hill has given rise to a number of subsidiary factories, such as ore-treatment plants.

In the metropolitan district metal and machinery workshops and clothing factories give employment to a much greater number of workers than any other group, next in order being food and drink factories. In the Hunter and Manning and in the South Coast divisions, metal and machinery workshops give employment to the greatest number of employees. Butter and bacon factories are most prominent in the northern coastal districts, and there are many sawmills. Beyond the coastal belt there are few large groups of establishments.

The extent of the operations of factories in each division in 1935-36 is indicated in the following table:—

Division.	No. of Establishments.	Average Number of Employees.*	Value of Lands and Buildings and Fixtures.	Value of Plant and Machinery.	Salaries and Wages Paid.	Materials and Fuel used.	Value of Goods Manufactured or Work done.	Value of Production (Value added to Raw Materials).
			£(000)	£(000)	£(000)	£(000)	£(000)	£(000)
Metropolis ...	5,387	157,643	39,041	33,248	25,638	68,295	121,683	53,388
Balance of Cumberland ...	143	2,233	483	398	341	719	1,350	631
North Coast ...	384	3,623	1,119	1,845	619	4,906	6,072	1,166
Hunter and Manning...	628	15,978	3,534	7,842	3,665	17,181	24,536	7,355
South Coast ...	271	5,362	1,472	3,755	998	6,313	8,460	2,147
Northern Tableland ...	146	733	192	214	110	265	471	206
Central Tableland ...	265	2,953	1,241	1,604	519	1,133	2,177	1,044
Southern Tableland ...	138	1,164	320	311	180	295	600	305
North-western Slopes...	127	732	202	271	121	420	666	246
Central-western Slopes	145	630	219	229	96	373	579	206
South-western Slopes...	309	2,256	667	521	349	1,451	2,054	603
Northern Plains ...	97	520	101	115	79	177	307	130
Central Plains ...	86	384	70	113	56	98	202	104
Riverina ...	255	1,788	463	344	270	906	1,335	429
Western Division ...	105	1,135	370	1,155	274	2,692	4,202	1,510
Total ...	8,486	197,134	49,494	51,965	33,315	105,224	174,694	69,470

\* Average number during period of operation (see page 446).

The foregoing statement illustrates the importance of the metropolitan factories in comparison with those of other districts. Nearly 80 per cent. of the employees work in the metropolitan district, where the capital value of factory premises and equipment represents 71 per cent. of the value in all districts.

#### CAPITAL VALUE OF PREMISES AND EQUIPMENT.

With regard to capital value of the land, buildings, and fixtures of the manufacturing industries, particulars are available only of premises which are the property of the occupier. If they are not the property of the occupier the rental value is recorded. In the following table, the capital value of the rented premises is computed by capitalising the rent paid at fifteen years' purchase. The statement shows the extent to which the capital value of the premises used for manufacturing purposes and of plant and machinery installed has changed since 1901:—

Year	No. of Establishments.	Capital Value of Premises (inc. rented).	Value of Machinery, Tools, and Plant.	Average Value per Establishment.	
				Premises.	Machinery, Tools and Plant.
		£	£	£	£
1901*	3,367	7,838,628	5,860,725	2,328	1,740
1911	5,039	13,140,207	12,510,600	2,608	2,483
1920-21	5,837	28,428,917	31,115,444	4,870	5,331
1925-26	8,196	43,954,312	45,994,534	5,363	5,610
1928-29	8,465	51,375,003	51,365,710	6,069	6,068
1929-30	8,208	53,785,319	53,515,368	6,553	6,520
1930-31	7,544	49,822,312	50,865,884	6,604	6,743
1931-32	7,397	46,462,828	50,277,992	6,281	6,497
1932-33	7,444	45,873,565	49,903,177	6,162	6,704
1933-34	7,818	46,310,925	49,083,921	5,924	6,278
1934-35	8,254	47,937,192	50,453,590	5,808	6,112
1935-36	8,486	49,494,222	51,964,982	5,832	6,124

\* Excluding a number of small country establishments.

The premises owned by the occupiers in 1935-36 were valued at £37,324,782, and rented premises (on the basis described above) at £12,169,440, the corresponding values in 1920-21 being £19,111,772 for premises owned by the occupiers and £9,317,145 for rented premises. The values shown for the last eight years are those appearing in the firms' books after allowing for depreciation; formerly many firms had been stating the value of their land, buildings and plant at the original cost.

A marked improvement in the class of buildings used as factories has been a feature of the progress of the industries. Provision has been made for ventilation and good lighting, in accordance with the requirements of the Factories and Shops Act, and for the general comfort and welfare of the employees, as well as for the expeditious handling of materials and products.

#### SIZE OF ESTABLISHMENTS.

The following statement shows the distribution of establishments in the metropolitan and extra-metropolitan districts, according to the number of persons engaged. Factories in Auburn, Granville, Lidcombe and Parramatta were classified as extra-metropolitan in 1920-21 and 1928-29, but following an extension of the metropolitan area have been grouped with the metropolitan factories in later years. Where two or more classes of manufacturing are conducted in one factory, each branch is treated, in the compilation of the factory statistics, as if it were a separate establishment.

Establishments employing on the average—	1920-21.		1928-29.		1931-32.		1935-36.	
	Establish- ments.	† Em- ployees.	Establish- ments.	† Em- ployees.	Establish- ments.	† Em- ployees.	Establish- ments.	† Em- ployees.
METROPOLITAN DISTRICT.								
Under 4 employees...	493	1,083	1,240	2,457	1,404	2,723	1,383	2,669
4 employees ...	239	920	391	1,564	376	1,504	385	1,540
5 to 10 employees	1072	7,566	1,425	10,047	1,177	8,150	1,327	9,351
11 „ 20 „ ...	684	10,118	881	12,872	682	10,069	835	12,400
21 „ 50 „ ...	639	20,437	808	25,862	584	18,482	848	27,249
51 „ 100 „ ...	222	15,158	321	21,999	193	13,286	335	23,880
101 and upwards	183	49,270	232	71,028	160	50,198	274	80,554
Total	3,523	104,552	5,298	145,829	4,576	104,412	5,387	157,643
REMAINDER OF STATE.								
Under 4 employees	513	1,173	1,226	2,540	1,473	2,802	1,362	2,781
4 employees ...	270	1,080	391	1,564	308	1,232	331	1,324
5 to 10 employees	864	5,896	962	6,509	662	4,369	873	5,933
11 „ 20 „ ...	380	5,351	340	4,857	190	2,681	285	4,103
21 „ 50 „ ...	181	5,569	155	4,769	108	3,207	150	4,464
51 „ 100 „ ...	43	2,903	34	2,332	34	2,397	39	2,711
101 and upwards	63	18,487	59	16,742	46	11,152	59	18,175
Total	2,314	40,459	3,167	39,313	2,821	27,840	3,099	39,491
NEW SOUTH WALES.								
Under 4 employees	1,006	2,256	2,466	4,997	2,877	5,525	2,745	5,450
4 employees ...	500	2,000	782	3,128	684	2,736	716	2,864
5 to 10 employees	1,936	13,462	2,387	16,556	1,839	12,519	2,200	15,284
11 „ 20 „ ...	1,064	15,469	1,221	17,729	872	12,750	1,120	16,503
21 „ 50 „ ...	820	26,006	963	30,631	692	21,689	998	31,713
51 „ 100 „ ...	265	18,061	355	24,331	227	15,683	374	26,591
101 and upwards	246	67,757	201	87,770	206	61,850	333	98,729
Total	5,837	145,011	8,465	185,142	7,397	132,252	8,486	197,134

† Number during period of operation (see page 446) working proprietors included.

In 1935-36 the establishments employing 10 hands or less represented 67 per cent of the total number, the factories in the metropolitan area being generally larger than those in other parts of the State. The average number of employees per establishment was 29.3 in the metropolis, 12.7 in the remainder of the State, and 23.2 in the whole State. In 1920-21 the averages were 30, 17, and 25 respectively, and in 1928-29 the corresponding figures were 27.5, 12, and 22 employees per establishment.

The increase in the number of small factories has occurred for the most part in boot-repairing establishments and garages where motor repairs are effected, which are the most numerous of the establishments with less than four employees. Part of the increase was due to the inclusion in later years of bakeries, from which returns were not collected prior to 1927-28. There were 88 boot-repairing establishments with 386 employees in 1920-21 and 602 with 1,036 employees in 1935-36. The works for motor vehicles and accessories in the respective years numbered 283 with 3,090 employees, and 1,133 with 8,199 employees. The establishments with less than 4 employees in 1935-36 included 567 with 791 persons engaged in boot repairing, and 677 motor vehicle works with 1,361 employees.

Establishments employing on the average--	Proportion of each Group to Total.							
	Metropolitan District.				Remainder of State.			
	1920-21	1928-29.	1931-32.	1935-36.	1920-21.	1928-29.	1931-32.	1935-36.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
Under 4 employees ...	14.0	23.4	30.7	25.7	22.2	38.7	52.2	43.9
4 employees...	6.6	7.4	8.2	7.2	11.7	12.3	10.9	10.7
5 to 10 employees...	30.4	26.9	25.7	24.6	37.3	30.4	23.5	28.2
11 „ 20 „	19.4	16.6	14.9	15.5	16.4	10.7	6.8	9.2
21 „ 50 „	18.1	15.2	12.8	15.7	7.8	4.9	3.8	4.8
51 „ 100 „	6.3	6.1	4.2	6.2	1.9	1.1	1.2	1.3
101 and upwards	5.2	4.4	3.5	5.1	2.7	1.9	1.6	1.9
Total ...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In the metropolitan district the proportion of establishments employing less than five hands was 33 per cent. in 1935-36. In the country districts the proportion of such factories was nearly 55 per cent. Increases in this proportion between 1928-29 and 1931-32 were due to the general curtailment of employment owing to industrial depression, and a substantial decrease occurred as business conditions improved. The proportion of factories with more than 20 employees in 1935-36 was slightly higher than the proportion in 1928-29.

### Factory Organisation.

It is of interest to consider the changes which have occurred in the structure of the various classes of manufacturing industries. As noted on page 444 the statistics are not compiled on the basis which would show the number and size of "factories" as understood in general usage, because where more than one industry is carried on in the same factory each branch is represented in the compilations as an establishment. For instance, the operations in factories attached to large retail stores relate to a wide range of products, and may include the manufacture of metal, wood or other containers, the printing of labels, etc., and these factories are treated, for statistical purposes, as so many comparatively small establishments.

Yet despite the absence of a classification of actual business units, the statistics, as compiled, furnish evidence of a definite trend toward the concentration of manufacture in enterprises of greater magnitude. In each of the following examples the number of establishments is related to the average number of employees engaged in the manufacture of the commodity specified, and the average production per establishment in 1901, 1911, 1920-21, 1928-29, and 1935-36.

Year.		Butter Factories.		Flour Mills.			Soap and Candle Factories.				
		No.	Average per factory.		No.	Average per mill.		No.	Average per factory.		
			Em- ployees.	Butter made.		Em- ployees.	Wheat treated.		Em- ployees.	Soap made.	Candles made.
1901	...	130	7	cwt. 2,355	89	8	bus. 105,276	44	11	cwt. 5,309	cwt. 790
1911	...	150	6	4,668	73	12	172,823	37	18	7,732	1,300
1920-21	...	126	8	5,659	60	15	193,263	26	36	12,184	1,439
1928-29	...	108	9	7,584	56	20	383,537	27	40	19,900	958
1935-36	...	98	12	10,854	53	25	514,655	24	45	21,354	434

Year.	Breweries.			Tobacco factories.			Boot Factories.		
	No.	Average per Brewery.		No.	Average per factory.		No.	Average per Factory.	
		Em- ployees.	Beer, etc. made.		Em- ployees.	Leaf treated.		Em- ployees.	Boots, Shoes and Slippers made.
1901 ...	51	20	gall. (000.) 274	20	48	cwt. 1,338	100	39	Pairs. 33,343
1911 ...	37	24	535	26	55	1,842	106	41	39,341
1920-21 ...	17	66	1,498	16	147	5,816	101	43	38,038
1928-29 ...	8	159	3,678	8	312	15,476	103	50	39,893
1935-36 ...	5	175	4,871	9	325	13,559	94	55	75,832

The increase in the average number of employees is more noteworthy when the increasing mechanisation of factory production is taken into consideration, and the particulars of average production indicate that the progress toward concentration of manufacturing into larger business units has been much greater than employment figures show. The movement has been remarkable in the case of breweries, tobacco factories, and flour mills.

#### EMPLOYMENT IN FACTORIES.

The number of factory employees in the various years is shown in this chapter by two sets of figures. The first represents the sum of the average number of employees in factories operating for the whole of the year, and the average number of employees during the period of operation in the case of factories which were working only part of the year.

In the second set of figures (which are shown where available) the number of employees working in all factories, irrespective of period of operation, has been reduced to the equivalent number working for a full year, so that it represents the average number of employees for the whole of the year in all factories. The number on the first of these bases, i.e., the average during the period of operation was 197,134 in 1935-36, and the equivalent average over the full year was 193,200.

The following comparative statement shows the average number of persons engaged (over the whole year) in the various classes of manufacturing industries during 1928-29 and each of the last five years:—

Class of Industry.	Persons engaged, including Working Proprietors.					
	1928-29.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Treatment of Non-metalliferous Mine and Quarry Products ...	4,060	1,638	1,779	2,391	2,998	3,303
Bricks, Pottery, Glass ...	6,674	2,391	3,122	4,452	5,931	6,623
Chemicals, Paint, Oil, Grease ...	5,947	5,135	5,376	5,588	6,143	6,615
Industrial Metals, Machines, Conveyances ...	62,090	38,981	43,902	49,750	57,810	66,277
Precious Metals, Jewellery ...	775	476	549	615	742	845
Textiles and Textile Goods (not Dress) ...	8,894	9,989	10,818	11,345	11,889	13,645
Skins, Leather (not Clothing or Footwear) ...	3,246	3,278	3,595	3,727	3,917	4,079
Clothing ...	28,473	19,669	21,349	23,788	27,031	28,577
Food, Drink, Tobacco ...	22,490	20,054	20,814	21,942	23,537	24,489
Woodworking, Basketware ...	8,864	3,838	5,073	5,956	7,609	8,738
Furniture, Bedding ...	5,737	2,527	2,890	3,669	4,516	5,582
Paper, Printing ...	13,932	11,331	11,828	12,851	14,079	14,969
Rubber ...	2,775	1,786	1,945	2,246	2,681	2,634
Musical Instruments ...	1,257	540	486	258	243	283
Miscellaneous Products...	1,422	1,765	2,003	2,358	2,738	3,249
Heat, Light, Power ...	4,120*	2,957	2,975	3,063	3,169	3,292
Total, Average over whole Year ...	180,756	126,355	138,504	153,999	175,033	193,200

\* Includes a number of employees engaged in maintenance work, not included in 1931-32 and later years.

In 1928-29, notwithstanding a serious industrial dislocation in the timber industry, a peak in factory employment was reached. As the world economic depression developed, a general decline commenced, but the movement was irregular as between groups, with the result that although employment in factories decreased in the years 1930-31 and 1931-32, the number of employees engaged in the textile group fell but little in 1930-31, and increased in 1931-32, when it was more than 12 per cent.

greater than in 1928-29. The relative inelasticity of demand for consumption goods helped to sustain employment fairly well in such factories as those concerned in the production of food commodities, while the number of employees was substantially reduced in factories associated with the building trades, metal working, furniture, rubber, etc.

Between 1928-29 and 1931-32, the decline was proportionately greatest in the group bricks, pottery and glass, reaching 64 per cent. The group treating non-metalliferous mine and quarry products showed a reduction of 60 per cent.; wood-working and musical instruments, 57 per cent.; industrial metals, 37 per cent.; clothing, 31 per cent.; food and drink, 11 per cent.; and paper and printing, 19 per cent. The decline in the aggregate number of factory employees between 1928-29 and 1931-32 was about 30 per cent.

In 1932-33 there was a partial recovery in employment, and improvement continued during the next three years in all groups excepting musical instrument factories. Consequently the number of persons engaged in most of the groups in 1935-36 was greater than in 1928-29. In textile factories the improvement amounted to 53 per cent., skins and leather works nearly 26 per cent., chemicals, paint, etc., 11 per cent., and paper and printing 7 per cent. In the largest group, metal and machinery works, the number of employees was 4,187 more than in 1928-29 and 23,109 more than in 1931-32. There has been a noticeable recovery in the factories concerned with such products as bricks and tiles, cement, etc., wood and furniture, which suffered most in the early stages of the depression.

In the following table the growth in factory employment is compared with the increase in the total population since 1901. The comparison is shown in quinquennial periods up to 1926. Then two periods are combined in order to smooth the fluctuations in factory employment during the depression. The decrease in factory employees between 1926 and 1931 represented an average rate of 5.6 per cent. per annum, and the increase in the next five years 8.6 per cent. per annum. The factory figures relate to the average number employed over the whole of the years specified (see page 446).

Period ended—	Increase in Factory Employees.		Increase in Population— Average Annual Rate.
	Number.	Average Annual Rate.	
		per cent.	per cent.
Dec. 1906 (5 years) ... ..	11,584	3.5	1.7
Dec. 1911 (5 years) ... ..	31,203	7.3	2.6
June 1916 (4½ years) ... ..	7,578	.	2.4
June 1921 (5 years) ... ..	27,082	4.4	2.1
June 1926 (5 years) ... ..	30,563	4.1	2.2
June 1936 (10 years) ... ..	23,426	1.3	1.3

#### *Nature of Employment.*

Of the persons engaged in manufacturing industries during the year 1935-36 approximately 7 per cent. were working proprietors or managers or overseers, 84.1 per cent. were actually employed in the different processes of manufacture, or in the sorting and packing of finished articles. Engine-drivers, etc., represented 1.3 per cent., clerical workers 6.1 per cent., carters,

messengers and others 1.5 per cent. The following statement shows the average number during the period of operation and the nature of employment of the persons engaged in each class of industry in that year:—

Class of Industry	Working Proprietors, Managers, and Overseers.	Clerks, etc.	Engine-drivers, etc.	Workers in Factory, Mill, etc.		Carters, Messengers, and others.	Persons regularly employed at their own Homes.	Total. (during period of operation.)
				Males.	Females.			
Treatment of Non-metalliciferous Mine and Quarry Products ...	270	205	78	2,895	3	44	...	3,495
Bricks, Pottery, Glass ...	392	303	84	5,826	176	105	...	6,886
Chemicals, Paint, Oil, Grease ...	466	934	99	3,368	1,622	147	1	6,637
Industrial Metals, Machines, Conveyances ...	4,128	3,849	520	56,418	2,096	498	2	67,511
Precious Metals, Jewellery ...	101	49	...	585	85	24	1	845
Textiles and Textile Goods (not Dress) ...	445	444	40	4,608	8,062	128	44	13,771
Skins, Leather (not Clothing or Footwear) ...	324	155	48	2,909	689	45	3	4,173
Clothing ...	2,018	798	18	5,621	20,157	263	160	29,035
Food, Drink, Tobacco ...	1,979	2,416	658	12,359	7,082	697	7	25,198
Woodworking, Basketware ...	1,063	487	270	6,933	94	234	1	9,082
Furniture, Bedding ...	475	255	2	3,929	875	58	14	5,608
Paper, Printing ...	1,343	1,393	13	8,419	3,901	314	1	15,384
Rubber ...	171	267	18	1,588	526	70	...	2,640
Musical Instruments ...	18	28	4	163	65	5	...	283
Miscellaneous Products ...	224	193	4	1,797	1,015	39	4	3,276
Heat, Light, Power ...	360	187	685	1,845	1	232	...	3,310
Total ...	13,777	11,963	2,541	119,263	46,449	2,903	238	197,134
Males ...	12,873	6,626	2,541	119,263	...	2,728	44	144,080
Females ...	899	5,337	...	...	46,449	175	194	53,054

The status of workers employed varied greatly in the sixteen standard classes of manufacturing industry. The average proportion of working proprietors, managers and overseers in 1935-36 varied from 3½ per cent. in textile works to 12 per cent. in those engaged in woodworking and basketware and in jewellery.

Amongst all males engaged in the manufacturing industries in 1935-36 the proportion of working proprietors, etc., was 8.9 per cent. and of workers in the factories 82.9 per cent. The corresponding proportions amongst the females were 1.7 per cent. and 87.5 per cent.

Of the clerical workers 44.6 per cent. were females, representing 10 per cent. of the total number of female employees in 1935-36.

The practice of giving out work at piece rates is very limited. Workers employed in their own homes represented only 1.2 per thousand of the total number employed, and nearly all were engaged by textile and clothing manufacturers. Outworkers in the clothing trades must be licensed annually by the Industrial Registrar in terms of the Factories and Shops Act. The licenses may be granted to persons who are in necessitous circumstances or are unable to work in factories owing to domestic ties or other sufficient reason, and an occupier of a factory may not employ more than one licensed outworker to every ten indoor workers or fraction thereof, except with the approval of the Industrial Registrar.

A comparative statement covering the last eight years is shown below:—

Year.	Working Proprietors, Managers and Overseers.	Clerks, etc.	Engine Drivers, etc.	Workers in Factory, Mill, etc.		Carters, Messengers and others.	Persons employed regularly at their own Homes.	Total (Period of Operation).
				Males.	Females.			
1928-29 ...	13,753	10,300	3,014	115,494	40,642	1,646	293	185,142
1929-30 ...	13,101	10,016	2,760	102,802	36,753	2,038	220	167,690
1930-31 ...	12,074	8,663	2,373	77,931	30,499	1,700	124	133,364
1931-32 ...	11,790	8,538	2,221	75,305	32,443	1,845	110	132,252
1932-33 ...	11,928	8,958	2,276	82,656	34,881	1,967	132	142,798
1933-34 ...	12,418	9,751	2,349	92,955	38,040	2,013	265	157,791
1934-35 ...	13,111	10,910	2,440	106,662	42,740	2,546	297	178,706
1935-36 ...	13,777	11,963	2,541	119,263	46,449	2,903	238	197,134

The proportion of working proprietors, managers, etc., increased from 7.4 per cent. to 9.1 per cent. between 1928-29 and 1930-31, and has since declined to 7 per cent. The proportion of factory workers, which declined from 84.3 per cent. to 81.3 per cent. in the period named, has regained pre-depression level.

#### *Sex Distribution of Employees.*

The following table shows the number of males and of females employed in factories, and the ratio to the male and female population respectively during various years since 1920-21. The figures are based on the average number of employees during the full year (see page 446).

Year.	Males.		Females.		Total. (Average over full year.)	
	Average Number.	Average per 1,000 of Male Population.	Average Number.	Average per 1,000 of Female Population.	Average Number.	Average per 1,000 of Mean Population.
1920-21 ...	107,700	101.0	31,511	30.8	139,211	66.6
1925-26 ...	128,846	108.9	40,928	36.0	169,774	73.2
1928-29 ...	135,773	107.1	44,983	37.0	180,756	72.8
1929-30 ...	122,005	95.1	40,908	33.1	162,913	64.7
1930-31 ...	93,881	72.6	33,724	26.9	127,605	50.1
1931-32 ...	90,667	69.5	35,688	28.2	126,355	49.2
1932-33 ...	99,718	75.9	38,786	30.4	138,504	53.5
1933-34 ...	111,599	84.2	42,400	32.9	153,999	58.9
1934-35 ...	127,114	95.3	47,919	36.9	175,033	66.4
1935-36 ...	140,896	104.8	52,304	39.8	193,200	72.7

In 1935-36 the manufacturing industries provided employment for 7.3 per cent. of the total population, viz., about 10.5 per cent. of males, and 4 per cent. of females. The proportion of the total population was almost equal to the ratio in 1928-29.

The Factories and Shops Act imposes certain restrictions on the employment of women and of young persons, and the Minister for Labour and Industry may prohibit the employment of boys under 16 or of females in connection with dangerous machinery or in any work in which he considers it undesirable that they should be employed.

The following table shows, at intervals since 1920-21, the industries in which women and girls have been employed in greatest numbers, and the ratio to every 100 males employed in the same industries. Only workers in the factory have been included, and managers, overseers, clerks, messengers, etc., have been excluded.

Industry.	Average Number of Women and Girls employed in Factory.* (Operatives only.)				Number of Women and Girls per 100 Males employed in Factory.* (Operatives only.)			
	1920-21.	1928-29.	1931-32.	1935-36.	1920-21.	1928-29	1931-32.	1935-36.
Food, etc.—								
Biscuits ... ..	822	940	898	1,165	102	142	143	171
Confectionery ...	1,190	1,629	1,332	1,736	113	139	153	182
Jam and fruit canning, pickles, etc.	951	917	826	650	122	133	142	112
Condiments, etc ...	545	673	562	687	125	184	163	168
Tobacco ... ..	1,262	1,392	1,253	1,793	131	152	151	195
Other food, etc. ...	325	705	848	1,051	6	9	11	12
Clothing, etc.—								
Woollen mills ...	793	1,908	2,297	3,497	101	207	166	134
Hosiery and knitting factories ...	1,186	3,343	2,916	3,293	663	383	309	335
Boot and shoe Factories ... ..	1,512	2,222	1,755	2,428	70	91	98	108
Clothing, dressmaking, and millinery	11,080	11,833	7,001	10,919	620	643	667	683
Hats and caps ...	815	1,178	945	1,092	160	227	223	204
Shirts, underclothing, etc....	2,719	4,296	3,544	5,231	2,124	1,672	1,729	1,650
Paper, paper bags and boxes ... ..	827	1,521	1,252	1,998	119	148	129	152
Printing and book-binding ... ..	1,711	1,865	1,313	1,812	34	30	27	28
Rubber goods ...	344	618	392	526	57	36	38	33
Other industries ...	3,520	5,602	5,309	8,571	5	6	10	10
Total ... ..	29,602	40,642	32,443	46,449	32	35	43	38

\* Average during period of operation, see page 446.

Women workers outnumber men in the clothing trades and in such industries as biscuit, confectionery, jam and pickle, and tobacco factories. In

most of the industries specified in the foregoing table the proportion of women has increased since 1928-29—exceptions include woollen mills, jam factories, hat and cap factories, and rubber works.

In the aggregate, the number of women employed as factory operatives increased from 40,642 in 1928-29 to 46,449 in 1935-36, or by 14.3 per cent., and the number of men from 115,494 to 119,263 or by 3.2 per cent. The higher rate of increase in the number of women may be attributed mainly to the fact that despite the depression a substantial volume of output was maintained in the factories which supply food and clothing, while unemployment was very marked in industries connected with the building trades and the manufacture of metal products, where male employees preponderate.

### *Ages of Employees.*

The following comparative statement shows factory employees (including working proprietors) classified in the three age groups, under sixteen years, sixteen and under twenty-one years, and adults:—

Year ended June.	Males.				Females.				Grand Total.
	Under 16 Years.	16 and under 21 Years.	Adults.	Total Males.	Under 16 Years.	16 and under 21 Years.	Adults.	Total Females.	
1911†	2,381	76,624		79,005	2,182	23,364		25,546	104,551
1921	3,526	13,420	90,754	107,700	3,466	9,998	18,047	31,511	139,211
1926	4,411	19,726	104,709	128,846	4,583	16,183	20,162	40,928	169,774
1929	3,958	23,354	108,461	135,773	5,054	17,663	22,266	44,983	180,756
1930	3,265	20,624	98,116	122,005	4,161	15,858	20,889	40,908	162,913
1931	1,826	16,624	75,431	93,881	2,734	13,143	17,847	33,724	127,605
1932	1,895	16,710	72,062	90,667	3,189	13,329	19,170	35,688	126,355
1933	2,355	18,174	79,189	99,718	3,514	14,712	20,560	38,786	138,504
1934	3,027	20,822	87,750	111,599	4,395	16,065	21,940	42,400	153,999
1935	3,990	24,143	98,981	127,114	5,571	18,401	23,947	47,919	175,033
1936	4,887	26,690	109,319	140,896	6,562	20,488	25,254	52,304	193,200

### *Percentage of Total Employees.*

1911†	2.3	73.3	75.6	2.1	22.3	24.4	100
1921	2.5	9.7	65.2	2.5	7.2	12.9	22.6
1926	2.6	11.6	61.7	2.7	9.5	11.9	24.1
1929	2.2	12.9	60.0	2.8	9.8	12.3	24.9
1930	2.0	12.7	60.2	2.6	9.7	12.8	25.1
1931	1.4	13.1	59.1	2.1	10.3	14.0	26.4
1932	1.5	13.2	57.1	2.5	10.5	15.2	28.2
1933	1.7	13.1	57.2	2.5	10.6	14.9	28.0
1934	2.0	13.5	57.0	2.8	10.4	14.3	27.5
1935	2.3	13.8	56.5	3.2	10.5	13.7	27.4
1936	2.5	13.8	56.6	3.4	10.6	13.1	27.1

† Calendar year—estimated.

Nearly 73 per cent. of the employees in factories are males. The proportion declined from 77.4 per cent. in 1920-21 to 71.8 per cent. in 1931-32, and has risen slightly in each of the last four years. The ratio of boys under 16 years of age declined from 2.6 per cent. to 1.4 per cent., and has since regained the former level. The proportion at ages 16 and under 21 years has trended slowly upwards, while in the adult group there has been a decrease.

The proportion of girls under 16 years has risen in recent years, while the proportion of ages 16 and under 21 years has remained remarkably steady. In the adult group there has been a decline from 15.2 per cent. to 13.1 per cent. since 1931-32.

The changes in the proportion of adults and juveniles since 1920-21 are summarized below:—

Year.	Employees in factories.			Total.
	Under 16 years.	16 and under 21 Years.	Adults.	
	per cent.	per cent.	per cent.	per cent.
1920-21 ... ..	5·0	16·9	78·1	100
1925-26 ... ..	5·3	21·1	73·6	100
1928-29 ... ..	5·0	22·7	72·3	100
1931-32 ... ..	4·0	23·7	72·3	100
1935-36 ... ..	5·9	24·4	69·7	100

Boys under 16 years represented only  $3\frac{1}{2}$  per cent. of the male employees in 1935-36 and those under 21 years  $22\frac{1}{2}$  per cent. Amongst the female employees, on the other hand, juveniles, representing  $51\frac{1}{4}$  per cent., outnumbered the adults, and the proportion under 16 years was  $12\frac{1}{2}$  per cent.

Nearly two-thirds of the boys under 16 years and about half those at ages 16 and under 21 years are employed in the metal and machinery industries. The female juveniles are employed for the most part in clothing, textile and food factories and in the printing trades.

### *Child Labour.*

The Factories and Shops Act prescribes that no child under 13 years may be employed in a factory, and that a child between the ages of 13 and 14 years may not be employed unless by special permission of the Minister for Labour and Industry. Moreover, the Public Instruction Act prescribes that children must attend school until they reach the age of 14 years, but exemptions from attendance may be granted in special cases, *e.g.*, if the Minister for Education is satisfied that exemption is necessary or desirable, or in the case of children under 13 years, if they have attained a certain standard of education.

In regard to children under 16 years of age the Factories and Shops Act prohibits the employment of children under 16 years of age unless the occupier has obtained a certificate by a legally qualified medical practitioner regarding the child's fitness for employment in that factory.

During 1936 certificates of fitness were issued to 12,079 children under 16 years of age, viz., 5,686 boys and 6,393 girls.

The following table shows the ratio between the number of children under 16 years of age employed in factories and the total number of children in the State at ages 14 and 15 years. The factory figures include some children aged 13 years, but the number is too small to affect the ratios in an appreciable degree.

Year.	Children under 16 years in Factories per cent. of all Children aged 14 and 15 years.		
	Boys.	Girls.	Total.
1911 ... ..	7·2	6·9	7·0
1920-21 ... ..	9·0	9·0	9·0
1932-33 ... ..	5·0	7·6	6·3
1935-36* ... ..	9·5	13·0	11·2

\* Estimated.

*Seasonal Trends in Factory Employment.*

Monthly statistics indicating the seasonal trends in employment in the various classes of factories have been collected as from July, 1932; aggregate figures (in thousands) for each month are shown below.

Month.	Employees on Factory Pay Rolls on the Pay Day nearest to the 15th of each Month.											
	Males.				Females.				Total.			
	1932-33.	1933-34.	1934-35.	1935-36.	1932-33.	1933-34.	1934-35.	1935-36.	1932-33.	1933-34.	1934-35.	1935-36.
Thousands.												
July ...	87.4	95.4	114.2	120.0	34.4	35.6	41.7	47.2	121.8	131.0	155.9	170.2
August ...	88.9	96.7	115.5	120.9	35.7	37.1	44.5	48.4	124.6	133.8	160.0	178.3
September...	90.3	97.5	114.7	131.5	36.8	38.4	45.9	49.9	127.1	135.9	160.6	181.4
October ...	91.5	100.7	118.6	133.3	37.8	40.2	47.2	51.0	129.3	140.0	165.8	184.3
November...	92.7	103.2	120.7	136.3	38.8	41.6	48.0	51.9	131.5	144.8	168.7	188.2
December ...	94.1	104.1	121.6	137.0	39.2	41.5	47.5	52.2	133.3	145.6	169.1	189.2
January ...	92.5	101.6	120.7	134.6	35.7	37.6	44.1	48.5	128.2	139.2	164.8	183.1
February ...	93.9	103.4	122.6	134.6	38.0	40.5	46.5	51.8	131.9	143.9	169.1	186.4
March ...	95.3	106.7	124.5	136.8	39.2	42.2	48.3	53.4	134.5	148.9	172.8	190.2
April ...	94.2	107.7	125.9	137.7	37.6	41.5	48.4	52.4	131.8	140.2	174.3	190.1
May ...	94.4	109.6	126.5	139.8	37.7	42.3	47.8	52.8	132.1	151.9	174.3	192.6
June ...	94.5	109.4	126.9	139.8	36.3	41.7	47.4	52.0	130.8	151.1	174.3	191.8

During this period of four years seasonal fluctuations in the aggregate figures have not been remarkable except in December and January. In December employment is increased in anticipation of the Christmas trade. In January there is a decline in the number of employees, as work in many factories is interrupted on account of the summer holiday season. The movable incidence of Easter affects the figures for March and April—the Easter holidays commenced before the middle of April in 1933 and 1936, at the end of March in 1934, and after the middle of April in 1935.

The monthly figures for each industry in 1932-33 are published in the 1932-33 issue of the Year Book, and those for subsequent years in the "Statistical Registers."

The monthly records of the metal and machinery works show a steady upward trend, with little seasonal fluctuation throughout the four years. In the clothing factories there seems to be greater activity at the changes of the season and before Christmas and Easter. Employment in the food, drink and tobacco group is greatest in the summer months.

An index of employment in factories is published in the chapter Employment of this Year Book.

## SALARIES AND WAGES IN FACTORIES.

The amount of salaries and wages quoted throughout this chapter is exclusive of amounts drawn by working proprietors.

The salaries and wages paid to employees in factories amounted to £33,314,534, in 1935-36 as compared with £38,544,687 in 1928-29 and £22,751,013 in 1931-32. A comparison of the amount of salaries and wages paid during certain years is given in the next table, together with the average amount received per employee. Similar information regarding each class of industry is published in the Statistical Register of New South Wales.

Year.	Salaries and Wages (exclusive of Drawings by Working Proprietors).					
	Amount.			Average per Employee, including Juveniles.		
	Males.	Females.	Total.	Males.	Females.	Total.
	£	£	£	£ s.	£ s.	£ s.
1911	8,917,583	1,130,079	10,047,662	118 18	44 16	100 5
1920-21	22,766,216	2,852,375	25,618,591	219 15	91 5	190 0
1925-26	29,370,062	4,196,484	33,566,546	240 1	103 12	206 2
1928-29	33,508,975	5,035,712	38,544,687	258 15	112 19	221 8
1929-30	30,228,967	4,647,028	34,875,995	260 8	114 12	222 13
1930-31	21,606,432	3,594,858	25,200,290	244 7	107 11	206 16
1931-32	19,258,969	3,492,044	22,751,013	226 1	98 14	188 14
1932-33	20,099,456	3,683,392	23,782,848	213 16	95 16	179 10
1933-34	21,885,356	3,863,191	25,748,547	207 2	91 18	174 6
1934-35	25,215,391	4,298,076	29,513,467	208 11	90 8	175 4
1935-36	28,576,202	4,738,332	33,314,534	212 7	91 6	178 13

The average wages are based on the average number of employees over the whole year (excluding working proprietors), and represent approximately the amount which would have been received by an employee working full time. The average earnings of males so calculated in 1935-36 were highest in heat, light and power works (£258 2s. 4d.), and paper and printing factories (£249 19s. 11d.) per male worker.

The average amounts paid to women and girls in the principal industries in which they were employed were as follows:—Food and drink factories, £103; printing and bookbinding trades, £90 19s. 11d.; and clothing factories, £85 12s. 6d. per female worker.

The wages paid to factory workers are for the most part subject to regulation by industrial awards and agreements, with reference to changes in the purchasing power of money. In this, there have been marked variations during the period under review, and, in order to measure the effective value of the wages, it is necessary to relate the average amounts to appropriate index numbers of retail prices. This matter is discussed in greater detail in the chapter, Food, Prices and Industrial Conditions of this Year Book.

#### MOTIVE POWER.

The full capacity of the factory machinery in 1935-36 was as follows:—Steam 945,933 horse-power, gas 12,301, electricity 516,025, water 21,613, oil 67,490.

The number of factories in which machinery was used is shown in the following table, also the distribution of motive power through the various agencies of steam, gas, electricity, water and oil, expressed in units of horse-power. The latter details relate to the average horse-power used as indicated in the factory returns:—

Year.	Establishments using manual labour only.	Establishments using Machinery.	Horse-power of Machinery (Average used).					
			Steam.	Gas.	Electricity.	Water.	Oil	Total (Gross).
1901	1,398	1,969	42,555	1,577	330	97	36	44,595
1911	1,489	3,550	113,939	12,201	20,671	222	185	148,218
1920-21	835	5,002	192,316	13,242	103,846	24	2,381	312,309
1925-26	920	7,276	299,538	15,618	181,890	1,585	5,308	503,939
1928-29	805	7,660	376,737	14,531	236,255	5,869	15,058	648,450
1929-30	620	7,588	490,116	11,919	249,606	11,351	9,534	782,526
1930-31	418	7,126	466,599	11,078	237,274	12,346	21,719	749,016
1931-32	358	7,039	390,172	11,075	260,514	15,978	43,061	720,800
1932-33	347	7,097	389,997	9,775	268,338	14,675	42,453	725,238
1933-34	351	7,467	486,945	9,786	312,721	16,150	43,407	869,009
1934-35	380	7,874	504,231	9,628	348,578	17,532	45,555	925,524
1935-36	425	8,061	576,079	7,805	365,621	18,096	49,932	1,017,533

The proportion of factories in which machinery is used increased from 70 per cent. in 1911 to 95 per cent. in 1935-36, and the power actually used in operating the machines from 148,218 horse-power, or 42 per factory using machinery, to 1,017,533 horse-power, or 126 per factory using machinery.

The increase in water power in recent years was due to the operations of the hydro-electric power stations at Burrinjuck and Nymboida. The use of oil-burning machinery has increased also during the past decade. It is being used for the generation of electricity in country districts, and the horse-power was doubled in 1931-32, when a large plant was brought into operation in the Broken Hill mining district.

The proportion of each kind of power in 1935-36 was:—Steam 56 per cent., gas 1 per cent., electricity 36 per cent., oil 5 per cent. and water 2 per cent. The corresponding proportions in 1911 were: Steam 77 per cent., gas 8 per cent., electricity 14 per cent., and oil and water 1 per cent.

The use of electrical machinery has expanded during the period under review, and a measure of duplication results when electric power used in factories is included as well as the power used for generating it. It is not practicable to assess the extent of the duplication in the absence of complete records as to the amount of electricity used for various purposes, e.g., railway and tramway traction and domestic supply. Therefore a statement has been prepared, as shown below, by excluding the power used

in heat, light and power works for the generation of electricity, gas, and hydraulic power in order to give a more-satisfactory illustration of the increasing use of machinery in factory production:—

Year.	Horse-power of Machinery (average used) in factories other than heat, light and power works.					
	Steam.	Gas.	Electricity.	Water.	Oil.	Total.
1901 ...	34,297	1,533	298	62	36	36,226
1911 ...	57,828	10,713	20,418	68	1,079	90,106
1920-21 ...	84,628	10,291	95,575	24	1,309	191,827
1925-26 ...	85,774	9,224	162,874	147	2,686	260,705
1928-29 ...	78,329	7,214	212,921	216	7,060	305,740
1929-30 ...	73,460	5,738	219,923	136	8,769	308,026
1930-31 ...	63,041	4,908	210,911	57	8,464	287,381
1931-32 ...	74,711	5,108	241,062	343	10,222	331,446
1932-33 ...	72,004	4,490	247,686	135	10,125	334,440
1933-34 ...	75,713	4,917	276,892	109	10,618	368,249
1934-35 ...	81,832	4,706	309,742	52	11,337	407,669
1935-36 ...	85,726	3,706	329,604	60	11,478	430,574

The power used in these factories in 1935-36 has increased by 41 per cent. since 1928-29. The great expansion has been in electricity. Increases in the use of steam power during the last three years have restored it to the same level as in 1925-26. The water power outside electricity works is negligible, and the use of gas for machinery has decreased. The oil-driven machinery is used mainly in country butter factories and refrigerating works.

#### FUEL CONSUMED.

The value of fuel consumed, motive power rented, and lubricating oil used in 1935-36 amounted to £6,273,485. This sum includes lubricating oil and water to the value of £428,426 and fuels of various kinds £5,845,059. The value of the fuels used in each class of industry is shown below:—

Industry.	Coal.	Coke.	Firewood, Charcoal, etc.	Oil and Tar.	Gas.	Electricity.	Total.
	£	£	£	£	£	£	£
Treatment of Non-metalliferous	73,885	11,826	7,301	2,647	14,041	106,401	216,101
Mine and Quarry Products	236,870	8,017	23,134	29,599	11,106	52,993	356,719
Bricks, Pottery, Glass	64,015	7,690	5,741	20,587	5,990	63,944	167,967
Chemicals, Paint, Oil, Grease	304,197	924,303	6,895	120,236	278,430	713,632	2,356,693
Industrial Metals, Machines, Conveyances	34,965	2,144	7	7,298	1,666	112,691	158,771
Textiles and Textile Goods (not Dress)	23,874	536	1,301	6,058	1,452	28,627	61,848
Skins, Leather (not Clothing or Footwear)	9,430	1,574	640	6,817	8,767	53,330	80,558
Clothing	189,130	31,489	73,097	54,330	33,905	287,439	669,393
Food, Drink, Tobacco	2,094	64	809	3,037	797	51,551	68,352
Woodworking, Basketware	227	202	140	1,542	1,370	25,817	29,358
Furniture, Bedding	14,754	349	809	2,936	13,556	87,917	120,321
Paper, Printing	17,048	929	602	877	1,411	54,570	75,437
Rubber	840,505	150,119	6,785	150,411	47,253	256,218	1,460,291
Heat, Light, Power	7,173	406	417	625	3,962	20,007	33,250
Other	1,818,167	1,134,768	127,678	425,000	423,709	1,915,737	5,845,069
Total	1,818,167	1,134,768	127,678	425,000	423,709	1,915,737	5,845,069

Nearly half the coal used as fuel in factories is used for the generation of electricity; large quantities are used also in metal and machinery works, brick, pottery and glass works and in food and drink factories. The coke is used for the most part in smelting and the gas companies utilise

substantial quantities. The firewood is used mainly in bakeries and butter factories, and the oil in the generation of electricity, metal and machinery works, and food and drink factories. Gas is used in the metal and machinery group of factories, which is not produced in gas works, but is a by-product of coke works where coke is made for the iron and steel works.

The quantities of coal, coke, firewood and fuel oil used in the various classes in 1935-36 are shown in the following statement, also the quantity of coal used as raw material in coke works and coal and oil in heat, light and power works:—

Class of Industry.	Coal.	Coke.	Firewood.	Oil.
	tons.	tons.	tons.	gallons.
Fuel—				
Treatment of Non-metal Mine and Quarry Products ... ..	130,285	21,726	9,008	106,780
Bricks, Pottery, Glass ... ..	235,189	2,307	31,669	1,660,873
Chemicals, Paint, Oil, Grease ... ..	59,684	6,858	953	1,407,310
Industrial Metals, Machines, Conveyances ... ..	380,182	846,846	1,733	4,823,565
Textiles, Skins, Leather, Clothing ... ..	60,467	3,087	2,128	1,439,112
Food, Drink, Tobacco ... ..	178,665	25,949	76,700	2,479,375
Wood, Furniture, etc. ... ..	2,040	206	569	99,507
Paper, Printing, etc. ... ..	15,124	215	350	111,948
Rubber ... ..	17,588	727	639	39,915
Heat, Light, Power ... ..	1,012,893	125,458	7,218	6,796,456
Other ... ..	6,097	307	534	17,359
Total used as Fuel ... ..	2,098,214	1,033,686	131,501	18,982,200
Raw Material—				
Coke Works ... ..	1,284,603	...	...	...
Heat, Light, Power ... ..	534,140	...	...	2,857,947
Total (Fuel and Raw Material)...	3,916,957	1,033,686	131,501	21,840,147

A comparative statement of the quantities of coal used as raw material and fuel, and of coke and wood used as fuel in the factories in each year since 1925-26 is shown below. Similar details are not available regarding oil prior to 1933-34, and are shown for the last three years only:—

Year ended June.	Coal.		Coke.	Wood.	Oil.
	Fuel.	Raw material, coke and gas works.			
	tons.	tons.	tons.	tons.	Gallons.
1926 ... ..	2,115,796	1,495,932	792,699	158,535	* 17,300,000† 17,913,862 21,840,147
1927 ... ..	2,253,087	1,681,008	838,635	154,404	
1928 ... ..	2,240,821	1,534,523	760,091	157,806	
1929 ... ..	2,201,235	1,531,135	779,996	167,401	
1930 ... ..	2,114,881	1,259,178	638,873	139,912	
1931 ... ..	1,603,401	992,361	455,519	100,054	
1932 ... ..	1,397,463	914,368	433,823	98,802	
1933 ... ..	1,499,024	1,158,209	561,618	102,109	
1934 ... ..	1,689,327	1,412,062	712,169	118,464	
1935 ... ..	1,891,607	1,758,626	961,496	132,022	
1936 ... ..	2,098,214	1,818,743	1,033,686	131,501	

\* Not available.

† Approximate.

Expansion or contraction in cokemaking rather than in the output of gas has been the factor causing fluctuations in the quantity of coal used as raw material. The use in gasmaking has declined relatively to the quantity of gas produced, as indicated on page 480. In coke-making a decline from 1,060,400 tons in 1926-27 to 398,900 tons in 1931-32 was followed by a rapid increase to 1,241,300 tons in 1934-35, and a further increase to 1,284,603 tons in 1935-36.

VALUE OF MATERIALS AND OUTPUT.

The following statement shows the value of materials and fuel used, the value of the output, as recorded in the manufacturers' returns, and the value of production, which is the value added to raw materials etc., in the processes of manufacture; also the amount paid in wages in factories in various years since 1901. Particulars as to the basis of the values stated and of certain changes in statistical method which affect the comparison are shown on page 435:—

Year.	Value of—					Salaries and Wages paid, (exclusive of Drawings of Working Proprietors).	Balance (Output, less Materials, Fuel and Wages).
	Materials, Containers, etc., Used.	Fuel Consumed, including Motive-power Rented.	Goods Manufactured or Work Done.	Factory Production (i.e., value added to raw materials, etc.).	Production per Employee. †		
	£(000)	£(000)	£(000)	£(000)	£	£(000)	£(000)
1901	15,141	496	25,648	10,011	160.2	4,952	5,059
1911	33,671	1,243	54,346	19,432	185.9	10,048	9,384
1920-21	91,104	3,609	137,841	43,128	309.8	25,619	17,500
1925-26	99,303	5,822	169,963	64,838	381.9	33,566	31,272
1928-29	105,357	6,314	185,298	73,627	407.3	38,544	35,083
1929-30	94,365	6,088	167,251	66,848	410.3	34,876	31,972
1930-31	64,579	4,381	118,484	49,524	388.1	25,200	24,324
1931-32	63,557	4,229	114,439	46,653	369.2	22,751	23,902
1932-33	70,085	4,792	124,446	49,569	357.9	23,783	25,786
1933-34	77,330	5,240	136,612	54,042	350.9	25,749	28,293
1934-35	87,097	5,906	154,433	61,430	351.0	29,513	31,917
1935-36	98,950	6,274	174,694	69,470	359.6	33,315	36,155

† Based on average number of employees over full year, see page 446.

The value of materials used in 1935-36 was £98,950,321, including containers and packing £4,199,525, and tools replaced and repairs to plant £2,522,185.

On the average, out of every hundred pounds worth of goods produced in factories in 1935-36, the materials, containers, etc., cost £56 13s., and fuel £3 12s., while the employees received £19 1s., leaving a balance of £20 14s. for the payment of overhead charges and other expenses and for profits. The

amounts in 1928-29 were materials and fuel £60 6s. salaries and wages £20 16s., and balance £18 18s. respectively. The balance is in general the proportion which accrues to the proprietors for general purposes, including depreciation, taxation, workers' compensation, etc., and profit. In some cases, however, the value of the output as recorded represents only the value at which the products are passed to the sales departments (see page 435).

The appended table shows separately the proportions of the items which made up the total recorded value of output of all the factories and of private establishments only. The latter comparison is the more satisfactory, because the nature of the work undertaken in Government workshops differs greatly from that of the private establishments, and the value of the output has been partly estimated (see page 440).

Year.	All Establishments.				Private Establishments Only.			
	Proportion per cent. of Total Value of Output absorbed by—			Total.	Proportion per cent. of Total Value of Output absorbed by—			Total.
	Materials and Fuel.	Salaries and Wages.	Overhead Charges, Profit, etc.		Materials and Fuel.	Salaries and Wages.	Overhead Charges, Profit, etc.	
1901	61.0	19.3	19.7	100	†	†	†	†
1911	64.2	18.6	17.2	100	†	†	†	†
1920-21	68.7	18.6	12.7	100	70.4	16.4	13.2	100
1925-26	61.9	19.7	18.4	100	63.4	18.3	18.3	100
1928-29	60.3	20.8	18.9	100	61.8	19.2	19.0	100
1929-30	60.0	20.9	19.1	100	61.5	19.2	19.3	100
1930-31	58.2	21.3	20.5	100	60.0	19.4	20.6	100
1931-32	59.2	19.9	20.9	100	61.4	18.2	20.4	100
1932-33	60.2	19.1	20.7	100	61.6	17.6	20.8	100
1933-34	60.4	18.8	20.8	100	61.5	17.7	20.8	100
1934-35	60.2	19.1	20.7	100	61.2	17.9	20.9	100
1935-36	60.2	19.1	20.7	100	61.1	18.0	20.9	100

† Not available.

Between 1920-21 and 1925-26 the proportion absorbed by materials and fuel in private establishments fell from 70.4 per cent. to 63.4 per cent.; since 1928-29 the proportion has been somewhat in excess of 61 per cent., except in the year 1930-31, when it was only 60 per cent. The proportion for expenses and profits, etc., rose from 13.2 per cent. to 18.3 per cent. in 1925-26 and to 20.6 in 1930-31, and has varied but slightly, with an upward tendency, since that year.

The ratio of salaries and wages, which had been about 19½ per cent. for some years, declined to 18.2 per cent. in 1931-32, and further to 17.6 per cent. in 1932-33. It has been slightly higher during the last three years.

The following table shows, in each class of industry in 1935-36, the proportions which the value of goods manufactured, the cost of materials used and of fuel consumed, the amount paid in wages and salaries, bore to the total output as stated in the manufacturers' returns.

Class of Industry.	Proportionate Value of Manufactured Goods represented by:—			
	Materials used.	Fuel; etc.	Salaries and Wages.	Balance.
	per cent.	per cent.	per cent.	per cent.
Treatment of Non-metalliferous Mine and Quarry Products ... ..	48·5	6·3	19·5	25·7
Bricks, Pottery, Glass ... ..	23·7	11·3	35·8	29·2
Chemicals, Paint, Oil, Grease ... ..	53·5	1·6	10·3	34·6
Industrial Metals, Machines, Conveyances ... ..	57·4	4·3	22·8	15·5
Precious Metals, Jewellery ... ..	35·9	2·1	36·5	25·5
Textiles and Textile Goods (not Dress) ... ..	59·4	2·2	20·9	17·5
Skins, Leather (not Clothing or Footwear) ... ..	74·8	1·3	12·6	11·3
Clothing ... ..	53·1	0·8	28·6	17·5
Food, Drink, Tobacco ... ..	68·2	1·8	10·4	19·6
Woodworking, Basketware ... ..	61·1	1·2	23·2	14·5
Furniture, Bedding ... ..	56·6	0·9	26·9	15·6
Paper, Printing ... ..	41·2	1·5	30·7	26·6
Rubber ... ..	65·7	3·4	21·7	9·2
Musical Instruments ... ..	29·4	2·7	33·9	34·0
Miscellaneous Products ... ..	47·6	1·4	23·4	27·6
Heat, Light, Power ... ..	12·3	20·4	11·3	56·0
Total ... ..	56·6	3·6	19·1	20·7

For the industries as a whole, the ratio of the total amount of wages to the recorded value of production, that is, the value added to raw materials was about 52 per cent. until 1930-31, when a decline occurred as a result of reductions in rates of wages and proportionately greater overhead expenses which were a consequence of the smaller turnover. During the last four years the ratio has been about 48 per cent. It varies considerably in different industries, as will be seen in the following table:—

Class of Industry.	Ratio of Amount of Wages Paid to Value of Production.					
	1928-29.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
Treatment of Non-metalliferous Mine and Quarry Products ... ..	49·9	57·9	48·0	46·2	42·2	43·1
Bricks, Pottery, Glass ... ..	60·0	59·1	56·1	59·3	54·0	55·2
Chemicals, Paint, Oil, Grease ... ..	33·9	23·8	23·4	24·7	23·3	22·9
Industrial Metals, Machines, Conveyances ... ..	65·2	68·8	65·8	61·6	61·0	59·0
Precious Metals, Jewellery ... ..	61·5	59·9	57·4	61·6	60·8	58·9
Textiles and Textile Goods (not Dress) ... ..	53·5	64·3	58·6	57·3	56·9	54·5
Skins, Leather (not Clothing or Footwear) ... ..	60·4	62·0	60·9	56·6	52·7	52·8
Clothing ... ..	61·6	61·4	62·6	61·7	61·7	62·1
Food, Drink, Tobacco ... ..	35·4	38·0	36·2	35·5	35·6	34·7
Woodworking, Basketware ... ..	62·3	61·7	59·9	61·3	59·4	61·4
Furniture, Bedding ... ..	63·6	65·4	63·1	58·6	62·2	63·3
Paper, Printing ... ..	57·1	55·5	54·5	52·6	54·5	53·6
Rubber ... ..	45·0	47·6	51·8	57·6	67·1	70·3
Musical Instruments ... ..	57·5	109·3	80·6	76·5	52·7	49·8
Miscellaneous Products ... ..	62·2	49·9	49·6	50·0	46·0	45·9
Heat, Light, Power ... ..	21·9	15·2	15·5	15·6	16·4	16·7
Total ... ..	52·4	48·8	48·0	47·6	48·0	48·0

## PRINCIPAL PRODUCTS.

The foregoing information relating to the manufacturing industry as a whole or to groups of industries serves to show the general industrial development, but it does not furnish particulars relating to individual industries. It is desirable that detailed information should be available regarding all the important industries, but the output of many of them, *e.g.*, engineering works, cannot be classified readily. The following statement of principal products includes only those for which particulars of quantity and value were collected for the years specified. Arrangements have been made to obtain the particulars concerning a larger number of commodities during the current year.

Commodities.	1928-29.		1934-35.		1935-36.	
	Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
Wool, Scoured ... ..lb.	19,649,577	2,106,373	29,241,613	2,079,819	29,946,076	2,773,399
"    Tops and Noils ...lb.	2,274,959	301,886	5,844,271	532,659	6,859,079	807,348
Leather—						
Dressed and Upper sq.ft.	19,396,618	1,660,787	27,718,603	861,929	26,186,702	934,871
Sole and Harness ...lb.			11,727,975	619,658	11,698,559	651,076
Soap ... ..cwt.	483,531	1,152,735	419,211	982,110	451,144	1,095,707
Candles ... ..lb.	2,896,276	104,297	1,588,997	55,167	1,349,075	47,176
Tallow, Raw ... ..cwt.	354,566	604,165	319,496	374,524	277,632	391,796
Bricks ... ..1,000	437,158	1,625,464	277,697	722,248	303,260	845,890
Cement ... ..ton	414,913	1,744,792	261,693	947,404	290,440	1,013,084
Timber, Sawn ...100 super ft.	1,395,297	1,750,408	1,722,937	1,829,491	1,963,034	2,021,592
Steel, Ingots ... ..ton	432,773	...	696,861	...	820,395	...
Pig Iron ... ..ton	461,110	...	698,493	...	783,233	...
Bacon and Ham ...lb.	22,340,106	1,163,507	18,709,766	702,368	21,155,669	783,819
Butter ... ..cwt.	819,050	7,173,369	1,251,412	6,276,534	1,063,592	6,183,664
Cheese ... ..lb.	6,203,409	282,755	8,220,229	275,004	7,060,100	292,250
Margarine ... ..lb.	16,627,959	551,014	18,210,870	492,920	17,981,712	526,262
Biscuits ... ..lb.	43,289,522	1,462,757	36,999,020	1,134,350	37,785,753	1,229,578
Ice ... ..ton	258,833	503,605	163,608	204,208	169,892	304,492
Aerated Waters, etc. ...gal.	6,980,373†	1,071,897	4,718,497	536,319	5,442,915	612,153
Jams and Preserves ...lb.	30,579,055	755,268	37,949,116	922,935	44,835,666	1,104,191
Pickles and Sauces ...pint	10,419,549	528,713	7,804,679	368,397	9,184,011	396,060
Flour ... ..ton (2,000 lb.)	440,011	4,977,770	555,173	3,867,950	523,281	4,088,326
Bran ... ..ton	87,250	559,012	123,504	538,369	110,063	572,385
Pollard ... ..ton	95,641	645,294	124,760	578,837	121,450	656,058
Meat, Preserved in Tins ...lb.	4,251,040	172,627	5,478,974	162,596	4,337,648	141,635
Sugar, Raw (94 net titre). tons	17,434	364,175	30,691	581,849	36,461	661,618
Beer and Stout ... ..gal.	29,420,920	3,176,085	22,024,596	2,338,698	24,355,495	2,564,413
Tobacco ... ..lb.	10,134,242	3,064,680	9,257,002	3,101,600	9,745,539	3,422,858
Cigarettes and Cigars ...lb.	5,203,558	1,790,623	3,689,308	1,781,777	4,014,298	2,029,227
Cloth, Woollen and Worsted						
sq. yds.	5,743,788	1,293,288	9,084,072	1,826,640	11,471,333	2,007,881
Socks and Stockings doz. prs.	1,142,192	1,343,990	939,839	682,983	1,014,119	726,552
Knitted Goods—Woollen No.	1,397,172	538,395	1,633,960	444,798	1,575,679	467,431
"    Cotton No.	5,609,330	297,073	3,498,664	210,398	3,250,672	183,480
Art Silk No.	1,855,943	408,924	4,101,628	559,715	5,718,174	636,144
Hats and Caps ... ..No.	2,860,332	948,292	3,461,412	4,647,766	3,090,180	612,843
Boots, Shoes and Slippers prs.	5,108,946	2,627,023	6,818,012	2,008,182	7,131,735	2,209,592
Goloshes & Rubber Shoes prs.	2,294,682	352,793	2,939,419	318,121	2,491,039	266,729
Rubber Tyres ... ..No.	670,952	1,703,780	631,586	1,206,727	617,543	1,896,459
Gas ... ..1,000 cub. ft.	10,683,530	2,139,694	9,682,805	1,298,590	10,185,081	1,430,178
Coke ... ..ton	1,003,626	1,441,321	1,122,997	1,264,278	1,173,898	1,313,273
Electricity ... 1,000 units	959,985	4,930,839	1,349,248	6,033,001	1,464,898	5,174,093
Motor Bodies ... ..No.	13,321	845,727	3,030	220,864	4,141	286,497

† Dozens.

‡ Exclusive of quantity made on farms.

§ lb.

The commodities shown above represent about 30 per cent. of the total value of the factory output. The list is exclusive of most of the products of the following important groups, *viz.*, metal and machinery works which in 1935-36 contributed £57,800,000, or 33 per cent. of the total value; the printing and furniture trades, of which the collective output was

valued at £12,400,000, or 7 per cent. of the total. The largest items shown in the statement are butter, flour, and scoured wool—of which the output is liable to fluctuation on account of seasonal conditions affecting rural production—and electricity, tobacco and beer.

# INDIVIDUAL INDUSTRIES.

## CEMENT WORKS.

There are extensive deposits of limestone and shale in the State, and they are used for making cement in five establishments situated in proximity to the supplies of raw material and coal mines to the north, south and west of Sydney.

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	3	5	5	5	5
Average Number of Employees* ...	642	1,143	465	702	683
Average Horse-power used ...	4,455	14,030	13,613	14,613	20,475
Value of Land and Buildings ...	£ 241,815	641,130	672,905	635,244	613,178
Value of Plant and Machinery ...	£ 655,258	1,506,435	1,246,837	1,112,946	1,050,420
Salaries and Wages paid ...	£ 143,176	327,308	123,216	158,073	172,826
Value of Fuel and Power used ...	£ 61,838	259,110	92,563	143,029	142,547
Value of Materials used ...	£ 193,107	499,819	111,799	190,539	203,121
Value of Output ...	£ 592,707	1,744,792	459,841	951,923	1,017,724
Value of Production ...	£ 337,762	985,863	255,479	618,355	672,056
Cement Made ... tons	159,979	414,913	116,943	261,693	290,440

\* Average over whole year.

The output of cement declined by 72 per cent. between 1928-29 and 1931-32, but has risen during the last four years, and in 1935-36 was 30 per cent. less than the quantity produced in 1928-29.

## GLASS AND GLASS BOTTLE WORKS.

Substantial progress has been made in recent years in the manufacture of glass and glass bottles in New South Wales. Particulars of the factories are shown below:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments...	34	37	27	32	38
Average Number of Employees* ...	2,040	1,802	1,412	2,314	2,759
Average Horse-power used...	1,300	2,203	3,122	4,686	5,885
Value of Land and Buildings ...	£ 262,953	336,791	370,037	399,461	439,048
Value of Plant and Machinery ...	£ 139,990	217,719	296,764	372,695	413,782
Salaries and Wages paid ...	£ 346,780	423,101	243,301	394,583	476,980
Value of Fuel and Power used ...	£ 108,751	87,557	86,436	112,560	120,364
Value of Materials used ...	£ 387,744	441,793	205,481	421,210	504,408
Value of Output ...	£ 1,142,279	1,331,288	766,776	1,384,834	1,586,141
Value of Production ...	£ 645,784	801,938	474,859	851,064	961,369

\* Average over whole year.

The number of employees increased from 1,802 in 1928-29 to 2,759 in 1935-36, and the value of the land, buildings and equipment from £554,510 to £852,830.

## BRICK, TILE AND POTTERY WORKS.

Owing to the abundance of clay, brickworks have been established in many parts of the State. In a number of cases the industry is associated with tile-making and pottery. Particulars of these industries are shown below:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments...	175	203	101	164	164
Average Number of Em- ployees* ... ..	4,271	4,692	939	3,559	3,822
Average Horse-power used	9,871	14,593	5,643	12,165	12,941
Value of Land and Build- ings ... .. £	951,595	1,348,954	713,015	1,021,245	1,096,741
Value of Plant and Machinery... .. £	1,192,522	1,654,901	787,291	1,144,147	1,219,031
Salary and Wages paid £	912,108	1,173,170	182,125	612,394	704,938
Value of Fuel and Power used ... .. £	311,394	429,568	47,740	234,014	257,015
Value of Materials used... £	246,995	440,025	55,787	227,748	277,414
Value of Output ...	£1,947,118	2,715,326	349,768	1,477,757	1,718,959
Value of Production ...	£1,388,729	1,845,733	246,241	1,015,995	1,184,530

\* Average over whole year.

The local factories are capable of supplying all the bricks and roofing tiles required for use in New South Wales. Oversea imports of flooring and mosaic tiles and glazed tiles for walls and hearths amounted to 213,232 square yards, valued at £83,905, in 1935-36.

Owing to the depressed condition of the building industry the output of the brick, tile and pottery works diminished to a remarkable extent between 1928-29 and 1931-32. The decline and subsequent revival are illustrated in the following statement showing the output of the principal products in 1928-29 and each of the last six years:—

Products.	1928-29.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Bricks... .. 000	437,158	56,701	28,521	77,614	168,075	277,697	303,260
Firebricks ... 000	8,642	6,418	5,875	9,418	10,850	15,206	15,918
Tiles—roofing... 000	20,414	2,418	1,094	2,466	4,927	12,953	14,255
„ other ... £	40,896	18,119	6,313	7,962	7,102	15,562	19,183
Pipes ... .. £	250,151	127,083	49,221	98,417	158,783	182,417	252,069
Pottery ... .. £	256,873	65,236	90,339	96,600	109,330	152,282	183,138

SOAP AND CANDLE FACTORIES.

The soap and candle factories supply practically the whole of the local requirements and there is a small export trade with the islands of the Pacific. The following table shows particulars relating to the industry:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	26	27	26	24	24
Average Number of Employees*	939	1,080	986	961	1,081
Average Horse-power used ...	964	1,196	1,242	1,210	1,657
Value of Land and Buildings £	223,423	352,700	320,188	304,727	296,170
Value of Plant and Machinery £	287,714	304,446	269,894	214,217	210,454
Salaries and Wages paid £	141,135	218,551	196,924	169,387	194,926
Value of Fuel and Power used £	40,160	35,441	28,636	22,051	25,636
Value of Materials used £	859,555	913,071	708,624	736,769	849,198
Value of Output ...	£ 1,177,511	1,613,066	1,355,089	1,489,194	1,644,382
Value of Production ...	£ 277,796	664,554	617,829	730,374	769,548
Materials Treated—					
Tallow ... .. cwt.	139,153	212,568	191,510	189,943	192,239
Alkali ... .. cwt.	40,322	93,537	95,566	117,141	125,679
Wax ... .. cwt.	22,159	18,775	9,017	5,340	5,755
Resin ... .. cwt.	22,327	38,638	25,907	27,449	31,548
Copra Oil ... .. cwt.	15,560	37,311	47,254	56,427	70,641
Sand ... .. cwt.	3,595	21,180	20,709	20,795	24,457
Principal Products—					
Soap ... .. cwt.	280,620	483,531	382,397	417,971	451,144
Soap Extract, etc. ... lb.	4,051,251	6,022,338	5,994,737	6,345,907	6,872,607
Candles (including wax) lb.	4,191,534	2,896,276	1,914,051	1,391,347	1,167,658
Glycerine ... .. lb.	1,882,423	2,442,745	2,475,501	2,635,286	2,595,917
Soda Crystals ... .. lb.	681,024	3,430,067	1,583,456	2,965,966	2,091,360

\* Average over whole year.

Candles and soda crystals are produced in chemical works as well as in soap factories. These quantities are not included in the foregoing table, the total output in 1935-36 being soda crystals, 4,947,812 lb., and candles, 1,349,075 lb.

METAL AND MACHINERY WORKS, ETC.

The group of factories relating to industrial metals, machines and conveyances is the most important of the manufacturing industries in the State, because it provides employment for more than 44 per cent. of the adult males engaged in factories and workshops.

The output of these works constitutes a considerable proportion of the total value of local manufactures, though they supply only a portion

of the local requirements of manufactured metals and machinery. Details of the products are not available, but in view of their importance the following particulars relating to the works in 1935-36 are shown:—

Industries.	No. of estab-lish-ments.	Average Number of Em-ployees.*	Average Horse-power Used.	Value of Land and Build-ings.	Value of Plant and Mach-inery.	Salaries and Wages Paid.	Value of Materials, Fuel & Power Used.	Value of Out-put.
Smelting, Refining, etc., Iron and Steel	171	10,687	99,553	£000 2,215	£000 5,781	£000 2,596	£000 14,210	£000 19,482
Engineering (not Marine or Electrical)...	297	7,767	12,130	1,273	1,110	1,564	2,065	4,446
Extracting and Refining other Metals...	10	927	10,565	201	624	253	5,553	7,147
Electrical Installations, Cables ...	108	4,791	4,970	732	444	820	1,316	2,636
Tram and Railway Rolling Stock ...	41	12,696	14,702	3,032	2,538	2,704	2,278	5,476
Motor Vehicles (including Bodies and Repairs) ...	1,120	7,555	5,124	2,314	485	1,213	1,416	3,391
Ship and Boat-building ...	50	3,483	8,652	1,400	1,681	779	388	1,302
Galvanised Iron, Tinsmithing ...	97	4,965	8,572	699	1,043	933	2,743	4,239
Wireworking (including Nails)...	40	2,694	0,601	453	433	535	2,310	3,276
Wireless Apparatus ...	35	2,616	996	230	143	350	965	1,565
Other ...	329	8,096	12,433	1,309	894	1,427	2,392	4,819
Total ...	2,298	66,277	184,298	13,858	15,176	13,174	35,636	57,777

\* Average number during the whole year.

The output and the horse-power of machinery of the iron and steel works exceed those of any other group in this class. The number of employees is greater in railway and tramway workshops, but nearly all of these are Government establishments concerned with repairs to a greater extent than manufacture. Of the motor vehicle works 1051 are repair shops, employing, on the average, about five persons, including the working proprietors.

A comparative statement relating to the metal and machinery works is shown below:—

Year.	Number of Establish-ments.	Average Number of Employees.*	Machinery in use—Average horse-power.	Salaries and Wages Paid.	Value of Materials and Fuel Used.	Value of Output.	Value of Production (i.e., added to raw materials).
1911 ...	934	29,066	28,691	£000 3,426	£000 7,986	£000 13,829	£000 5,843
1920-21...	1,262	45,603	80,465	9,897	23,789	37,064	13,275
1925-26...	2,075	58,179	104,258	13,082	29,872	50,341	20,469
1928-29...	2,170	62,090	119,982	15,045	31,922	54,995	23,073
1929-30...	2,144	54,574	113,681	13,314	26,610	46,274	19,664
1930-31...	1,981	41,402	103,574	9,160	16,897	29,831	12,934
1931-32...	1,956	38,981	133,099	7,845	16,332	27,730	11,398
1932-33...	1,957	43,902	136,449	8,489	20,875	33,774	12,899
1933-34...	2,059	49,750	155,962	9,416	24,934	40,230	15,296
1934-35...	2,200	57,810	178,748	11,163	30,111	48,402	18,291
1935-36...	2,298	66,277	184,298	13,174	35,636	57,777	22,141

\* Average during the whole year.

These industries experienced a period of activity in the years 1926-27 to 1928-29. The number of employees was greatest in 1926-27, viz., 62,387, but the value of the output, etc., was higher in 1928-29. The expansion was stimulated by reason of large projects undertaken in the State, e.g., the Sydney Harbour Bridge, the City Railway, and the electrification of the suburban railways and the construction of water conservation works.

From 1928-29 to 1931-32 the number of employees decreased by over one-third and the value of output by nearly 50 per cent., the decline in the latter being due in part to lower prices. There was a partial recovery in

1932-33, then followed a rapid increase in activity, and in 1935-36 the number of employees and the value of the output exceeded previous records. Apart from the progress indicated by comparative statistics, there has been a remarkable diversification in factory production, and the range of products made in the metal and machinery works is expanding steadily.

### *Iron and Steel Works.*

The principal iron and steel works in Australia are in operation at Newcastle and Port Kembla in proximity to the northern and southern coalfields respectively. The Newcastle works are situated on a water frontage at Port Waratah, where, in 1913, the Broken Hill Proprietary Co. Ltd. commenced the construction of works for the treatment of iron ore from South Australia.

The works at Port Kembla were developed from an establishment founded many years ago at Lithgow, in the western coal district, which was extended subsequently and equipped with up-to-date furnaces, coke ovens, rolling mills, etc. Following a decision to transfer the Lithgow works to the sea coast, a new establishment was founded at Port Kembla, and the Government of New South Wales constructed a railway, which was opened in August, 1932, between Port Kembla and Moss Vale, on the Main Southern railway.

In 1928 the business was merged into an organisation known as Australian Iron & Steel Ltd., with which were associated two English engineering firms and an Australian firm of shipowners and colliery proprietors. A more recent development has been the merging of interests by the companies owning the Newcastle and Port Kembla Works, and each acquired by exchange a parcel of shares in the other organisation.

These companies own extensive deposits of iron ore, limestone, coal, and other minerals in various localities, as well as ships and other facilities for transporting raw materials from place of production to the works. Their interests extend to a large number of subsidiary factories.

The products include iron and steel of various grades, iron and steel pipes and spun cast-iron pipes, boilers, rails, steel sleepers, plain and galvanised steel sheets, wire and wire netting, and a new unit is to be erected at Newcastle for manufacturing tin plate. By-products are sulphate of ammonia, tar, benzol, and solvent naphtha.

The following table shows the production of steel and pig iron in New South Wales since 1926-27:—

Year ended 30th June.	Pig Iron.	Steel Ingots.	Steel Rails, Bars and Sections.	Year ended 30th June.	Pig Iron.	Steel Ingots.	Steel Rails, Bars and Sections.
	Tons.	Tons.	Tons.		Tons.	Tons.	Tons.
1927	438,899	410,728	360,212	1932	190,132	221,488	178,740
1928	428,404	405,590	350,941	1933	336,246	392,666	295,523
1929	461,110	432,773	353,921	1934	487,259	518,326	431,765
1930	308,369	314,917	256,696	1935	698,493	696,861	585,838
1931	232,783	228,363	188,708	1936	783,233	820,395	671,244

Production fell away during the years 1929-30 to 1931-32, but a rapid recovery ensued, and in 1933-34 the output was greater than in any pre-depression year. This record was exceeded in 1935-36 by 61 per cent. in pig iron, 58 per cent. in ingot steel, and 55 per cent. in steel rails, etc.

A feature of recent activity has been the growth of exports of iron and steel from New South Wales. The quantity (exclusive of scrap iron) was 445,600 cwt., valued at £262,919 in 1933-34; 1,245,250 cwt., valued at £428,800, in 1934-35; and 804,675 cwt., valued at £445,249, in 1935-36. In this year the quantity sent to New Zealand was 779,956 cwt., valued at £421,131. In 1936-37 the exports were 1,034,329 cwt., valued at £531,422, of which 1,006,172 cwt., valued at £503,993 were sent to New Zealand.

### Metal Extraction.

In addition to the iron and steel works at Newcastle and Port Kembla there were in 1935-36 ten other establishments for the treatment of ores and the extraction of metals. The quantities of silver, copper and other metals extracted are shown below, together with the source from which the ores, concentrates, etc., were obtained. The pig iron produced in the iron and steel works is included:—

Metals.	Quantities of Metals extracted from Ores, Concentrates, etc., the produce of—								
	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	N. Territory.	New Zealand.	Pacific Is.
Silver ... ..ozs.	52,838	20,945	41,360	506	11,489	143,849	7,357	20,507	...
Copper ... ..tons	848	9	1,756	321	3	9,516	1	...	...
Tin ... .."	1,289	86	637	...	33	621	38	...	...
Iron—pig ... .."	...	...	...	783,233	...	...	...	...	...
Antimony ... .."	38	...	...	...	...	...	...	...	...
Platinum ... ..ozs.	23	...	...	...	...	...	...	14	12
Osmiridium ... .."	...	...	...	...	...	...	...	...	...

### WOOLLEN AND TWEED MILLS.

The woollen goods required in the State, with the exception of a small proportion imported overseas, are manufactured in Australia, and the yarn used in knitting mills is supplied by Australian factories.

Woollen mills have been established in Sydney, Goulburn, Albury, Lithgow, Liverpool and Orange. In 1935-36 there were twenty establishments in this group, employing on the average 2,913 males and 3,581 females. In some of the factories all the processes, from scouring the greasy wool to weaving tweed and cloth, were carried out. Others were concerned with spinning, or topmaking, or weaving only, and tops were made for export as well as for local use.

Details of employment, output, and other particulars relating to woollen and tweed mills, at intervals since 1921, are shown in the following table:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ... ..	9	11	15	20	20
Average Number of Employees* ... ..	1,028	2,993	3,882	5,282	6,494
Average Horse-power used ... ..	2,795	6,704	8,472	8,512	9,233
Value of Land and Buildings ... ..	£ 224,474	540,680	615,320	659,787	712,624
Value of Plant and Machinery ... ..	£ 384,662	1,023,692	1,021,546	983,400	1,008,059
Salaries and Wages paid ... ..	£ 235,668	409,019	609,911	684,108	847,160
Value of Fuel and Power used ... ..	£ 23,517	57,941	81,167	118,771	120,894
Value of Materials used ... ..	£ 745,848	1,811,049	1,239,400	2,102,851	2,599,140
Value of Output ... ..	£ 1,437,647	2,144,234	2,146,026	3,438,895	4,343,333
Value of Production ... ..	£ 668,282	775,244	825,459	1,217,273	1,623,349
Materials treated—					
Scoured Wool ... ..	lb. 3,603,448	5,748,343	10,232,957	13,572,526	15,084,423
Cotton Yarn ... ..	332,501	272,005	270,023	106,251	13,577

\* Average over whole year.

The quantity of scoured wool processed in New South Wales in combing, spinning and weaving mills and in hat and cap factories in 1935-36 was 15,240,845 lb., the estimated greasy weight being 29,024,000 lb. The quantities used in the various processes are shown below:—

					Scoured wool. lb.
Used for making tops	..	..	..	..	11,541,432
Carded, or used for making felt, etc.	..	..	..	..	3,542,991
Used in hat and cap factories	..	..	..	..	156,422
Total	..	..	..	..	15,240,845

The quantity of tops made in New South Wales was 10,396,029 lb. and noils 1,127,544 lb. The tops used in New South Wales factories, including tops imported from Victoria, amounted to 8,531,229 lb. The quantity of tops exported overseas from New South Wales in 1935-36 amounted to 3,095,194 lb., valued at £398,742, and exports of noils were 767,270 lb., valued at £58,218. The quantity of tops sent to Canada was 1,896,775 lb., and to Great Britain 558,399 lb. Exports of tops have expanded since 1929-30 when the quantity was only 353,766 lb.

The yarn made in New South Wales in 1935-36 was 10,147,415 lb., and 6,737,385 lb. were used in weaving mills to make 8,299,745 square yards of worsted cloth and 2,719,861 square yards of woollen cloth. The output of the mills included 119,154 pairs of blankets and 8,982 rugs and shawls.

The production of tweed cloth, flannel and blankets in New South Wales during the last eight years is shown below; also the output of cotton tweed, which has been made for the most part in factories for cotton goods:—

Year.					Cloth, Woollen and Worsted.	Cotton Tweed.	Blankets.
					sq. yds.	sq. yds.	pairs.
1928-29	...	...	...	...	5,793,900	*	87,735
1929-30	...	...	...	...	6,151,100	*	75,739
1930-31	...	...	...	...	5,934,700	1,039,900	40,178
1931-32	...	...	...	...	7,458,900	1,575,079	66,245
1932-33	...	...	...	...	8,441,000	1,779,503	77,330
1933-34	...	...	...	...	9,877,700	1,295,506	112,147
1934-35	...	...	...	...	9,084,100	1,867,439	114,373
1935-36	...	...	...	...	11,471,300	2,021,963	119,154

\* Not available.

#### HOSIERY AND KNITTING FACTORIES.

Marked progress has been made in the production of hosiery and knitted goods. In 1920-21 there were 33 establishments with 1,425 employees; the value of materials and fuel used amounted to £573,128, and the output was valued at £872,476. In 1935-36 there were 76 establishments employing 4,688 persons, including 3,474 women and girls, the value of materials and fuel was £1,268,533, and the value of the output was £2,222,229.

The following statement shows a comparative review of the operations of the hosiery and knitting factories during 1928-29, 1931-32, and each of the three years ended 30th June, 1934 to 1936:—

Particulars.	1928-29.	1931-32.	1933-34.	1934-35.	1935-36.
Number of Establishments ..	67	64	79	76	76
Average Number of Employees*	4,492	4,112	4,134	4,257	4,688
Average Horse-power used ...	1,736	2,139	1,888	1,953	2,086
Value of Land and Buildings £	665,628	506,073	571,969	568,119	610,721
Value of Plant and Machinery £	541,795	457,317	484,098	506,057	534,427
Salaries and Wages paid ...	£ 619,780	506,276	551,535	540,164	580,197
Value of Fuel and Power used £	26,920	29,994	31,525	30,085	32,656
Value of Materials used ...	£1,413,195	908,414	1,097,630	1,223,782	1,235,877
Value of Output ...	£2,732,950	1,849,321	2,133,040	2,152,045	2,222,229
Value of Production ...	£1,292,835	910,913	1,003,885	898,178	724,469
Wool used—					
Wool ... .. lb.	1,273,522	1,169,773	1,615,220	1,570,552	1,733,690
Cotton ... .. „	1,942,479	2,019,641	1,622,545	1,809,051	1,893,289
Silk ... .. „	102,653	127,483	129,618	118,767	149,867
Artificial Silk ... .. „	2,282,590	1,350,917	2,426,761	2,596,231	2,699,918
Articles Produced—					
Socks and Stockings doz pairs	1,142,192	815,987	938,099	930,839	1,014,119
Other Garments ...	£1,297,679	1,021,786	1,195,426	1,289,483	1,379,345

\* Average over whole year.

#### WOOL-SCOURING AND FELLMONGERING.

Only a very small proportion of the wool clip of New South Wales is scoured locally, as oversea manufacturers generally prefer to buy wool in the grease and to treat it in accordance with the purpose for which they require it. The oversea exports of wool in 1935-36 were greasy 313,409,000 lb., scoured 26,607,000 lb., tops 3,095,000 lb., and noils, etc., 1,282,000 lb.

Particulars of the operations of the wool scouring and fellmongering works during 1928-29, 1931-32, and the last three years are shown below:—

Items.	1928-29.	1931-32.	1933-34.	1934-35.	1935-36.
Number of Establishments ...	31	30	32	33	33
Average Number of Employees*	564	832	1,104	972	895
Average Horse-power used ...	2,076	2,327	2,698	2,783	2,974
Value of Land and Buildings £	174,034	134,817	155,709	156,202	165,571
Value of Plant and Machinery £	156,767	127,804	121,173	123,923	110,869
Salaries and Wages paid ... £	150,594	184,434	222,907	217,049	182,399
Value of Fuel and Power used £	25,716	39,399	41,826	35,254	36,400
Value of Materials used ... £	1,972,092	1,296,287	2,746,277	1,627,913	2,317,023
Value of Output ... .. £	2,175,240	1,580,977	3,146,052	2,107,619	2,776,619
Value of Production ... .. £	177,432	245,291	357,949	444,452	423,196
Materials Treated—					
Greasy Wool ... .. lb.	28,547,411	28,737,336	33,397,707	33,011,306	40,348,344
Skins ... .. No.	2,040,259	4,907,844	5,796,261	4,284,957	3,371,460
Articles Produced—					
Scoured Wool ... .. lb.	19,649,577	28,922,555	34,946,941	29,241,613	29,946,076
Pelts ... .. No.	1,647,472	2,775,906	3,594,668	2,924,827	2,059,788

\* Average over whole year.

In the fellmongering establishments 3,371,460 skins were treated, and 11,179,908 lb. of scoured wool were produced in 1935-36, the balance being the output of the scouring works.

TANNERIES.

Skins and hides are available in large quantities, and the tanning industry provides nearly all the raw material needed for local requirements and a fairly extensive oversea trade in leather. The oversea export of sole leather amounted to 15,362 cwt., valued at £71,654, in 1935-36, and the value of other leather was £243,209. Supplies of fancy leather are obtained partly by importation. The quantity of glazed kid imported was 102,137 square feet in 1935-36.

The following tables give particulars of the tanneries for the year 1920-21 and at intervals thereafter:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	80	69	65	63	62
Average Number of Employees* ...	1,209	1,174	1,193	1,457	1,499
Average Horse-power used ...	2,688	2,962	3,119	3,420	3,380
Value of Land and Buildings £	265,166	253,423	245,214	246,636	246,459
Value of Plant and Machinery £	172,132	164,981	160,276	174,991	193,217
Salaries and Wages paid ...	£ 262,724	267,453	237,633	267,228	285,788
Value of Fuel and Power used £	17,855	22,816	26,434	30,644	30,219
Value of Materials used ...	£1,684,791	1,587,055	961,368	1,123,715	1,219,878
Value of Output ...	£2,103,525	2,089,373	1,422,301	1,619,479	1,768,140
Value of Production ...	£ 400,879	479,502	434,499	465,120	518,043

\* Average over whole year.

The hides and skins treated in the tanneries in 1935-36 consisted of 545,837 cattle hides, 577,998 calfskins, 4,513 other hides, 1,459,237 sheep pelts, 2,072,108 sheepskins, 546,831 goat skins, and 6,700 other skins. The leather produced was as follows:—7,893,395 square feet of dressed and upper leather from hides, 18,293,307 square feet of dressed leather from skins, 11,698,559 lb. of sole and harness leather, and 199,240 lb. of other leather.

A comparative statement of the materials treated and the principal products of the tanneries is shown below:—

Year.	Materials Treated.				Principal Products.		
	Hides.	Sheep Pelts and Skins.	Other Skins.	Bark.	Leather.		Basils.
					Dressed and Upper.	Sole, Harness, etc.	
	No.	No.	No.	tons.	sq. ft.	lb.	lb.
1929-30 ...	778,432	2,750,969	518,754	9,191	14,768,638	10,085,177	2,025,747
1930-31 ...	689,859	3,107,890	516,247	8,468	14,970,207	8,324,244	1,802,509
1931-32 ...	931,355	3,629,673	370,904	9,265	18,324,710	9,886,403	1,881,338
1932-33 ...	919,045	3,800,475	414,899	9,385	20,782,794	10,241,184	1,737,865
1933-34 ...	982,330	4,773,503	428,333	9,580	24,956,425	11,085,644	2,105,761
1934-35 ...	1,136,820	3,715,623	428,636	10,270	27,718,603	11,772,813	1,232,457
1935-36 ...	1,128,348	3,531,345	553,531	9,428	26,186,702	11,897,799	933,251.

HAT AND CAP FACTORIES.

There has been considerable expansion in the industry organised for the manufacture of hats and caps. The Australian products have gained the premier place in local markets and some are exported to New Zealand. In 1935-36 the employees numbered 1,791, of whom 1,157 were females. There were 27 establishments listed under this classification, and 26 were situated in the metropolitan area.

Particulars of the operations in the hat and cap factories in various years since 1921 are as follow:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments	28	31	27	26	27
Average Number of Employees* ...	1,433	1,868	1,502	1,708	1,791
Average Horse-power used	764	716	668	802	927
Value of Land and Buildings ...	£ 174,315	412,094	195,432	186,753	213,957
Value of Plant and Machinery ...	£ 88,817	147,103	80,898	82,583	90,052
Salaries and Wages paid	£ 185,394	314,616	199,725	242,728	253,855
Value of Fuel and Power used ...	£ 7,574	11,416	9,790	9,978	9,954
Value of Materials used	£ 393,372	509,393	245,065	263,956	303,171
Value of Output ...	£ 747,545	1,058,126	626,370	665,878	673,707
Value of Production	£ 346,599	537,317	371,515	391,944	360,582
Hats and Caps made	No. 2,284,572	2,860,322	2,533,596	3,461,412	3,096,180

\* Average over whole year.

#### BOOT AND SHOE FACTORIES.

The manufacture of boots and shoes in New South Wales was extensive even before the beginning of the present century, and many varieties of footwear are made in the local factories. The bulk of the output is used in the State, and quantities are exported, principally to New Zealand, New Guinea, Papua, and Fiji.

Particulars of the operation of boot and shoe factories since 1921 are shown in the following table:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	101	103	92	92	94
Average Number of Employees*	4,459	5,110	3,861	5,021	5,137
Average Horse-power used ...	1,379	1,798	1,574	1,690	1,719
Value of Land and Buildings	£ 371,985	538,339	377,479	386,691	426,068
Value of Plant and Machinery	£ 184,549	255,323	223,235	228,661	234,803
Salaries and Wages paid...	£ 628,541	888,314	543,899	627,200	655,143
Value of Fuel and Power used	£ 10,365	13,228	13,604	14,671	15,306
Value of Materials used ...	£ 1,496,068	1,424,791	860,788	1,079,387	1,254,647
Value of Output ...	£ 2,540,222	2,665,943	1,634,148	2,040,833	2,229,776
Value of Production ...	£ 1,033,789	1,227,926	759,756	946,775	959,823
Leather Used—					
Sole ... .. lb.	4,822,678	4,873,665	4,006,499	5,958,202	6,016,906
Upper ... .. sq. ft.	7,282,176	7,773,595	6,810,325	8,686,532	10,182,009
Articles Produced—					
Boots and Shoes ... pairs	3,232,413	3,908,103	3,173,294	4,714,883	5,205,095
Slippers, etc. ... ..	609,398	1,200,843	1,496,215	2,096,604	1,923,154
Uppers, N.E.I. ... ..	41,925	62,244	31,799	20,381	33,398

\* Average over whole year.

The number of factories for the manufacture of boots and shoes was 94 of which 90 were situated within the metropolitan area and 4 in the remainder of the State. The establishments for making of rubber shoes and goloshes are not included in this group, but are classified as rubber works (see page 479).

The output of boots, shoes and slippers declined from 5,108,000 pairs in 1928-29 to 4,089,000 pairs in 1930-31, then it began to expand, and in 1935-36 was the largest on record. The improvement has been due to some extent to reorganisation in the distributing trade.

The figures in the table are exclusive of particulars of boot repairing establishments, which in 1935-36 numbered 602, with 1,028 employees. Materials and fuel to the value of £107,171 were used, including 779,311 lb. of sole leather and 14,663 square feet of upper leather; the output, valued at £320,834, included a number of boots and shoes.

### FLOUR MILLS.

The amount of mill-power for grinding and dressing grain is ample for manufacturing the flour consumed in the State, and there is a considerable export trade.

Details concerning flour-milling at intervals since 1921 are as follow:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	60	56	53	52	53
Average Number of Employees* ...	918	1,094	1,182	1,380	1,299
Average Horse-power used ...	6,384	7,893	7,509	7,818	8,111
Value of Land and Buildings £	561,688	804,901	750,852	787,346	794,766
Value of Plant and Machinery £	572,456	884,194	776,444	745,277	741,293
Salaries and Wages paid ... £	219,964	312,880	291,447	315,229	309,594
Value of Fuel and Power used £	37,746	70,282	79,838	86,615	82,676
Value of Materials used ... £	4,951,650	5,498,861	3,582,029	4,038,287	4,480,699
Value of Output ... ... £	5,590,405	6,276,317	4,607,595	5,045,110	5,327,808
Value of Production ... ... £	601,009	707,174	945,128	920,208	764,433
Wheat Treated ... ... bus.	11,596,000	21,478,000	23,745,000	27,042,000	25,277,000
Articles Produced—					
Flour ... ... †tons.	244,818	449,011	490,662	555,173	523,281
Bran, Pollard, Sharps, etc. ,,	100,545	185,993	217,506	250,971	235,316
Wheat Meal, etc. ... cwt.	21,863	75,289	69,871	101,224	111,470
Flour exported oversea ... †tons.	36,367	183,200	210,702	272,486	230,413

\* Average over whole year.

† 2,000 lb.

The average annual production of flour during the three years ended June, 1936, was about 525,750 tons, and the annual export—oversea and interstate—was approximately 267,000 tons, or half the output.

### BISCUIT FACTORIES.

There are in the State eleven establishments engaged in the manufacture of biscuits, of which ten are within the metropolitan area. The output of biscuits was 37,785,000 lb., with a value of £1,229,578, in 1935-36. An export trade in biscuits is maintained with the islands of the Pacific and Eastern countries, the total oversea exports amounting to 2,273,135 lb. in 1935-36. Small quantities are imported from abroad, the quantity in 1935-36 being 38,821 lb.

Details relating to the biscuit factories for 1921 and other years are given below:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	10	11	11	11	11
Average Number of Employees *	1,783	1,832	1,743	2,187	2,129
Average Horse-power used ...	1,115	515	721	1,471	1,470
Value of Land and Buildings £	164,031	226,962	247,665	262,125	269,084
Value of Plant and Machinery £	135,285	132,521	145,753	148,765	149,008
Salaries and Wages paid ... £	221,791	273,660	238,321	284,097	289,008
Value of Fuel and Power used £	23,614	37,172	28,680	35,937	36,537
Value of Materials used ... £	936,747	786,824	507,090	551,115	618,193
Value of Output ... .. £	1,358,266	1,510,415	1,018,512	1,171,666	1,285,531
Value of Production ... .. £	397,905	686,419	482,742	584,614	630,801
Materials Treated—					
Flour ... tons (2,000 lb.)	12,210	13,808	9,865	12,785	12,579
Sugar... .. tons	3,024	3,455	2,402	2,454	2,830
Biscuits produced ... lb.	38,308,360	43,289,522	30,619,396	36,996,020	37,785,753
„ exported oversea lb.	4,479,651	2,662,229	1,436,664	1,818,745	2,273,135

\* Average over whole year.

#### SUGAR MILLS.

Sugar cane is cultivated in the lower valleys of the northern coastal rivers of New South Wales, and the cane is crushed at three large mills, situated, respectively, at Harwood Island, on the Clarence River, at Broadwater, on the Richmond, and at Condong, on the Tweed.

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	3	3	3	3	3
Average Number of Employees* ...	159	111	124	144	198
Average Horse-power used ...	1,279	2,114	2,756	2,897	2,970
Value of Land and Buildings £	106,070	133,870	134,000	233,922†	230,000
Value of Plant and Machinery £	425,283	538,046	540,813	935,711†	932,053
Salaries and Wages paid ... £	63,003	77,995	62,261	63,293	76,073
Value of Fuel and Power used £	8,636	7,749	9,144	12,505	14,998
Value of Materials used ... £	303,651	259,355	336,798	389,311	437,300
Value of Output ... .. £	476,405	367,983	512,581	583,263	663,975
Value of Production ... .. £	164,118	100,879	166,639	181,447	211,677
Cane crushed ... .. tons	131,313	147,412	179,153	227,424	280,472
Articles produced—					
Raw Sugar 94 Net titre tons	15,580	17,434	23,297	30,691	36,461
Molasses ... .. gals.	649,800	914,000	940,600	1,059,555	1,390,180

\* Average over whole year; mills in operation about 4 or 5 months annually.

† Revaluation.

Since July, 1915, there has been an embargo on the importation of foreign sugar, except with the permission of the Minister for Trade and Customs. The Government of Queensland, in terms of an agreement with the Commonwealth Government, purchases the raw sugar produced in New South Wales and Queensland and makes arrangements for its refining and distribution at prices fixed by the agreement. The term of the current agreement extends to 31st August, 1941.

#### Sugar Refinery.

There is one sugar refinery in the State. It is situated at Pyrmont, Sydney, and it treats raw sugar from the North Coast and Queensland mills. During the year 1935-36 the quantity of raw sugar treated was 2,670,597 cwt., and it gave an output of 2,653,087 cwt. of the refined article, valued at £4,240,037.

The three mills and the refinery provided employment for 990 persons during the period of operation in the year 1935-36.

BUTTER FACTORIES.

Butter-making is one of the chief industries connected with the preparation of articles of food, and 96 per cent. of the butter made in New South Wales is made in factories. Employees in butter factories numbered 1,153 in 1935-36, and the output was 119,120,000 lb. of butter, as compared with 143,208,000 lb. in 1933-34, when the quantity was the highest yet recorded.

The annual production of butter depends largely on seasonal conditions in the dairy-farming districts, but the general trend has been towards an increased output, and there has been a marked improvement in quality. Nearly 90 per cent. of the butter made in factories is graded as choicest by official graders.

The butter factories are organised for the most part on a co-operative basis, and each dairy-farmer who supplies cream is paid according to the amount of butter obtained from it. The factories are under the supervision of Government officials, who are trained for the purpose of instructing the dairy-farmers and factory managers. By this means the quality of the butter produced in New South Wales factories is maintained at a high standard.

Butter is an important item of the export trade, and the marketing of butter for both local consumption and export is regulated under an arrangement known as the Australian Stabilisation Scheme, which is described in the chapter "Dairying Industry."

Details concerning butter factories and their operations in various years since 1921 are as follow:—

Items.	1920-21.	1928-29.‡	1931-32.‡	1934-35.	1935-36.
Number of Establishments ...	126	108	105	102	98
Average Number of Employees*	1,002	1,021	1,077	1,193	1,153
Average Horse-power used ...	3,843	7,597	9,867	10,819	10,852
Value of Land and Buildings ' £	308,189	627,717	599,802	563,838	546,955
Value of Plant and Machinery £	395,668	663,756	661,630	626,414	613,057
Valaries and Wages paid	225,392	284,729	286,124	280,603	275,734
Value of Fuel and Power used £	61,655	69,169	75,639	73,418	74,160
Value of Materials used ...	£ 8,017,379	6,925,551	5,830,785	5,827,920	5,824,458
Value of Output ...	£ 8,974,967	7,557,363	6,455,893	6,439,028	6,396,012
Value of Production ...	£ 895,933	562,643	549,469	537,690	497,394
Butter Produced ... cwt.	713,078	819,050	1,057,569	1,251,412	1,063,592
Exported oversea† cwt.	248,833	137,998	352,351	514,929	293,025

\* Average over whole year.

‡ Includes 4 creameries.

† Exclusive of exports oversea via Queensland ports.

The quantities of butter produced as shown above include butter made from cream imported from other States, viz., 8,098 cwt., in 1928-29, 5,308 cwt. in 1931-32, 7,399 cwt. in 1934-35, and 8,061 cwt., in 1935-36.

The 98 butter factories mentioned in the foregoing table include seven factories in which cheese is made as well as butter.

There were also 55 other establishments engaged in the treatment of dairy produce, viz., 29 cheese factories, 23 bacon and ham factories, and 3 factories manufacturing condensed milk. Particulars of the operations of these factories for the years 1931-32 to 1935-36 were:—

	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of employees ...	549	531	603	603	675
Value of land and buildings...	£218,406	209,087	208,141	223,410	231,106
Value of plant and machinery	£205,889	188,370	197,228	193,838	213,396
Salaries and wages paid ...	£136,529	121,115	130,373	125,924	141,463
Value of materials and fuel ...	£945,723	903,603	961,064	966,072	1,151,402
Value of output ...	£1,171,933	1,127,200	1,201,860	1,244,002	1,468,509
Value of production ...	£226,215	223,597	240,796	277,930	317,107

In addition there were in 1935-36 two factories in which cheese was treated after manufacture.

Bacon, hams, butter, and cheese are made on farms as well as in factories, information as to the total production, and details as to supervision of factories, marketing of the products, etc., are shown in the chapter of this Year Book relating to the dairying industry.

#### MEAT-PRESERVING AND REFRIGERATING.

The production of preserved meat has fluctuated considerably, and was at a peak of nearly 10,000,000 lb. in 1918-19 and 1919-20. The annual production in recent years was about 5,000,000 lb.

Almost all the frozen and chilled meat is exported overseas, and the condition of world markets, as well as the seasons, affects the operations of refrigerating works. The importation of meat into the United Kingdom, the principal market for Australian meat, is subject to regulation in terms of the Ottawa Agreement.

The following table shows the production of establishments treating meat by canning, freezing and chilling during 1928-29 and later years:—

Products.	1928-29.	1931-32.	1933-34.	1934-35.	1935-36.
<b>Preserving Works—</b>					
Tinned Meat ... lb.	4,251,040	5,814,100	4,909,833	5,478,974	4,337,648
Other Products ... £	70,524	78,432	53,522	28,808	41,025
<b>Refrigerating Works—</b>					
<b>Carcases Frozen for Export—</b>					
Cattle ... No.	36,411	20,972	16,003	68,118	48,846
Sheep ... No.	319,995	947,661	617,102	812,556	238,117
Lambs ... No.	358,582	1,103,879	1,319,810	1,314,087	1,279,540
Pigs ... No.	3,474	11,458	609	7,040	1,904
<b>Carcases Chilled—</b>					
Cattle ... No.	14,999	21,255	30,203	29,219	22,601
Sheep ... No.	13,732	55,700	71,691	42,760	52,818
Lambs ... No.	10,495	20,405	44,827	41,505	47,027
Pigs ... No.	14,533	13,341	11,283	12,513	9,192

Since 1928-29 there has been a marked increase in the number of lambs frozen for export.

BREWERIES.

In 1935-36 five establishments in the State were classed as breweries, and three were within the metropolitan boundaries. The tendency to concentration in large units has been very marked in this industry.

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	17	8	5	5	5
Average Number of Employees *	1,122	1,275	811	810	873
Average Horse-power used ...	3,289	4,124	5,427	6,206	6,186
Value of Land and Buildings £	714,155	843,365	845,264	866,957	879,262
Value of Plant and Machinery £	924,181	1,038,768	869,217	779,849	769,194
Salaries and Wages paid ... £	286,685	387,017	226,194	238,495	249,828
Value of Fuel and Power used £	66,848	78,000	63,388	64,207	67,745
Value of Materials used £	1,316,561	1,381,494	571,585	648,811	715,143
Value of Output ...	2,515,224	3,215,957	1,911,468	2,363,817	2,586,272
Value of Production ... £	1,131,815	1,756,463	1,276,495	1,650,799	1,803,384
Materials Treated—					
Malt ... bus.	832,850	992,385	586,106	741,139	795,758
Hops ... lb.	831,656	935,989	539,455	658,301	694,344
Sugar ... tons	5,477	5,505	3,054	4,013	4,557
Ale, Beer, Stout produced gals.	25,470,404	20,420,920	17,346,770	22,024,596	24,355,495

\* Average over whole year.

TOBACCO FACTORIES.

Nine tobacco factories were in operation during the year 1935-36, all within the metropolitan area. The industry is highly organised, all but a small proportion of the output being produced in four large establishments. Conditions of employment in the tobacco factories are maintained at a high standard.

Most of the tobacco treated is imported from the United States of America. The Australian leaf treated in 1935-36 represented 15 per cent. of the total used in manufacture. The quantity of leaf produced in New South Wales has decreased in recent years owing to disease amongst the plants and to difficulties in the marketing of the product. The production was 5,953 cwt. in 1935-36, as compared with 25,066 cwt. in 1930-31.

The following table shows details of the operations of tobacco factories in New South Wales at intervals since 1921:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	16	8	9	8	9
Average Number of Employees*	2,358	2,492	2,263	2,749	2,921
Average Horse-power used ...	657	1,199	1,181	1,315	1,565
Value of Land and Buildings £	291,604	527,350	572,815	577,990	586,475
Value of Plant and Machinery £	226,043	363,150	425,977	540,938	465,061
Salaries and Wages paid ... £	356,781	468,904	454,421	523,859	555,864
Value of Fuel and Power used £	11,697	12,598	15,730	9,127	11,143
Value of Materials used ... £	3,403,517	3,345,869	3,862,098	3,897,927	4,296,496
Value of Output ... £	4,240,746	4,863,300	4,834,876	4,896,665	5,657,412
Value of Production ... £	825,532	1,504,833	957,048	989,611	1,349,773
Materials Treated—					
Australian Leaf ... lb.	876,007	504,633	793,803	1,583,207	1,847,953
Imported Leaf ... „	9,546,861	13,362,076	9,901,645	9,933,319	10,354,955
Articles produced—					
Tobacco ... lb.	6,622,540	10,134,242	8,628,575	9,257,002	9,745,539
Cigars ... „	146,433	86,057	53,338	73,323	81,483
Cigarettes ... „	5,072,903	5,117,501	3,354,242	3,615,985	3,932,815

\* Average over whole year.

Large quantities of tobacco and cigarettes are exported, mainly to other Australian States. The records of the interstate movement are not complete, but returns supplied by the principal firms engaged in the trade cover the following quantities of Australian produce in 1935-36, viz.:—2,085,100 lb. of tobacco and 2,290,000 lb. of cigarettes exported from New South Wales to other States; and 600,600 lb. of tobacco and 398,200 lb. of cigarettes imported interstate into New South Wales.

The annual consumption in New South Wales of Australian-made tobacco during the three years ended June, 1936, was estimated as follows:—Tobacco, 5,533,000 lb.; cigars, 107,000 lb.; cigarettes (factory made), 1,847,000 lb.; total 7,487,000 lb. The annual consumption of imported tobacco, cigars and cigarettes was about 62,000 lb. Tobacco used by smokers for making their own cigarettes is recorded as tobacco, and an extension of this custom tends to reduce the proportion of tobacco consumed in the form of cigarettes made in factories.

#### SAWMILLS.

Sawmilling is an important industry in many parts of the State, the majority of the mills being situated in the forest areas. Moulding and planing are undertaken at some mills, also the cutting of wood-paving blocks. In the metropolitan district sawmills are conducted in connection with yards where imported timbers are treated and joinery work is done.

Details concerning the sawmilling industry at intervals since 1921 are as follow:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	496	477	349	447	440
Average Number of Employees*	4,977	3,982	1,486	3,687	4,289
Average Horse-power used ...	14,597	17,695	12,076	17,085	18,108
Value of Land and Buildings £	811,830	986,290	699,159	731,729	724,156
Value of Plant and Machinery £	908,192	813,170	546,454	570,341	607,477
Salaries and Wages Paid ... £	926,276	888,891	268,060	595,419	715,898
Value of Fuel and Power used £	24,405	35,123	22,787	37,677	42,230
Value of Materials used ... £	2,732,656	3,295,133	877,911	2,045,172	2,340,744
Value of Output ... £	4,103,924	4,891,185	1,319,415	3,126,895	3,561,630
Value of Production ... £	1,346,863	1,560,929	418,717	1,044,046	1,178,656
Logs Treated—					
Hardwood ... cub. ft.	14,844,000	12,299,200	4,501,000	10,390,800	11,934,086
Softwood Native ...	5,075,100	5,523,500	2,322,600	6,098,400	6,384,571
„ Imported ...	576,900	369,900	425,100	5,086,100	5,698,867
Sawn Timber Produced—					
Hardwood ... sup. ft.	117,781,800	94,696,500	34,251,000	77,864,600	87,805,695
Softwood Native ...	40,366,700	41,636,900	17,851,300	44,739,500	45,536,746
„ Imported ...	5,262,200	3,196,300	3,992,500	49,689,600	56,960,919

\* Average over whole year.

The native logs treated during 1935-36 consisted of 11,934,100 cubic feet of hardwoods and 6,384,600 cubic feet of softwoods; the quantities of sawn timber produced therefrom being 87,805,695 super. feet, and 45,536,746 super. feet respectively. The output of the sawmills was affected by slackness in the building trades from 1928-1929 to 1932-33, and there was a substantial improvement in later years owing to greater activity in building and construction. The output of imported softwoods expanded from

3,200,000 super feet in 1928-29 to nearly 57,000,000 super feet in 1935-36. As a result of increases in Customs duties on imported sawn timber a greater proportion is imported unsawn and treated in local mills.

### RUBBER WORKS.

The demand for rubber goods in New South Wales is being supplied to an increasing extent with local products. The value of oversea imports of rubber goods (excluding crude rubber) was £1,660,500 in 1925-26. Three years later it declined to £1,020,700, and in 1935-36 it was only £131,190. The imports of crude rubber in these years were:—36,610 cwt. in 1925-26, 117,090 cwt. in 1928-29, and 123,035 cwt. in 1935-36.

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	20	83	92	97	98
Average Number of Employees* ...	1,035	2,775	1,786	2,631	2,634
Average Horse-power used ...	945	9,844	14,402	17,347	18,015
Value of Land and Buildings ...	£ 121,848	843,814	955,674	840,161	844,511
Value of Plant and Machinery ...	£ 166,195	836,947	821,567	595,612	550,120
Salaries and Wages paid ...	£ 162,015	670,200	350,840	514,573	533,563
Value of Fuel and Power used ...	£ 12,339	94,678	68,270	84,508	84,189
Value of Materials used ...	£ 343,504	1,566,265	891,916	1,500,551	1,613,619
Value of Output ...	£ 634,690	3,149,467	1,696,488	2,351,963	2,456,666
Value of Production ...	£ 278,847	1,488,524	736,302	766,904	758,858
Tyres made ...	No. †	670,952	399,051	631,585	617,843
Goloshes and Rubber Shoes made prs.	†	2,294,682	2,167,291	2,939,419	2,491,039

\* Average over whole year.

† Not available.

The recorded value of the output of the rubber works represents, for the most part, the value at which the products of the large establishments are transferred to their selling organisations.

### ELECTRIC LIGHT AND POWER WORKS.

The industries connected with the production and supply of electric light and power are making steady progress. The establishments include undertakings of the State and local authorities, of which further details are shown in the chapter "Local Government" of this Year Book.

There are large works, controlled by the Commissioner for Railways, in Sydney, Newcastle and Lithgow to supply electricity for transport and for the railway and tramway workshops. A Government undertaking is maintained at Port Kembla, whence power is supplied for harbour works, etc., and current is transmitted to constructional works in the vicinity and to a number of townships along the South Coast and in the Southern Highlands. Another scheme is operated by means of power available from the waters discharged through the Burrinjuck Dam for irrigation purposes. The current is supplied in bulk and by retail over a wide area which embraces Wagga Wagga, Cootamundra, Junee, Cowra, and the Federal Capital.

The largest of the municipal electricity works is the undertaking administered by the Sydney County Council, from which electricity is distributed over a large portion of the metropolitan district. Two hydro-electric schemes, viz., one in the Dorriggo Shire and the other at Nymboida, have been established by local governing bodies in the north-eastern areas, and current from the latter is reticulated through a considerable part of the North Coast district.

The development in electric light and power works since 1921 is shown by the details given in the following table. The establishments in 1935-36 consisted of 6 owned by the State, 42 by local bodies, 76 by companies:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments ...	117	126	118	123	12
Average Number of Employees*	1,292	2,180	1,857	1,955	2,03
Average Horse-power used ...	111,591	334,294	389,354	513,102	582,12
Value of Land and Buildings £	1,381,092	2,938,924	4,815,101	4,858,582	4,919,42
Value of Plant and Machinery £	2,531,358	8,354,176	10,251,153	9,698,260	10,197,26
Salaries and Wages paid £	327,157	676,195	504,068	511,666	554,59
Value of Fuel and Power used £	590,373	1,431,186	1,115,075	1,241,301	1,585,62
Value of Materials used £	54,995	238,422	154,909	192,390	270,79
Value of Output ...	£1,697,763	4,956,461	5,178,785	5,041,691	5,186,27
Value of Production ...	£1,052,395	3,286,853	3,908,801	3,608,000	3,600,64
Coal used ... tons	510,088	882,355	741,130	891,049	1,005,42
Electricity generated—					
Light ... 1,000 units	53,691	959,985	1,075,706	1,349,248	1,464,898
Power ... „ „	288,845				

\* Average over whole year.

### GAS WORKS.

The gas works in 1935-36 consisted of 19 governmental concerns, mostly country municipal or shire works, and 23 operated by gas companies.

Despite the substantial progress that has been made in the installation of electric plants for purposes of illumination, power, and cooking, the use of gas has increased during the last four years, as will be seen in the following table:—

Items.	1920-21.	1928-29.	1931-32.	1934-35.	1935-36.
Number of Establishments...	46	48	47	43	42
Average Number of Employees* ...	1,642	1,668	1,039	1,103	1,136
Average Horse-power used...	3,125	4,018	4,162	4,343	4,124
Value of Land and Buildings ... £	1,066,074	874,702	854,593	845,509	841,103
Value of Plant and Machinery ... £	1,892,835	2,907,445	2,985,924	3,018,935	3,034,400
Salaries and Wages paid £	437,318	373,412	266,331	243,586	250,991
Value of Fuel and Power used ... £	112,995	247,331	183,844	217,133	195,715
Value of Materials used £	829,906	1,130,072	743,931	690,014	643,308
Value of Output ... £	2,264,644	2,867,142	2,142,583	1,989,947	2,135,679
Value of Production £	1,321,743	1,489,739	1,214,808	1,082,800	1,286,656
Materials Treated—					
Coal ... tons	564,122	661,878	515,508	517,347	534,140
Shale ... tons	27,298	...	...	...	...
Oil ... gals	3,700,462	1,851,132	2,194,034	2,223,285	2,857,947
Articles Produced—					
Gas 1,000 cub. feet	8,131,712	10,683,530	9,320,868	9,682,805	10,185,081
Coke ... tons	346,380	435,816	336,846	335,791	336,357
Tar ... gals.	9,861,830	13,244,818	10,950,449	11,426,357	10,970,090
Ammoniacal Liquor					
gals.	4,216,929	4,885,155	5,852,921	4,567,245	4,583,310
Sulphate of Ammonia					
tons.	1,061	6,546	4,966	5,220	5,070

\* Average over whole year. A number of men engaged on maintenance work were included in 1920-21 and 1928-29, but such employees were excluded in later years.

In addition to the coke and sulphate of ammonia made in gas works, considerable quantities are made in other establishments in which coal is treated. The total quantity of coke produced by all plants in 1935-36 was 1,173,898 tons, and of sulphate of ammonia 14,497 tons.

## MINING INDUSTRY.

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NEW SOUTH WALES contains extensive mineral deposits of great value and variety. Coal was discovered as early as 1796, though under the industrial conditions prevailing at that time its importance was not fully realised. World-wide interest, however, was excited by the announcement in 1851 that gold had been discovered in New South Wales. It attracted a rapid flow of immigration to the country and promoted the development of its resources. In later years copper, tin, and silver-lead deposits were opened up. Coal and silver-lead have proved to be the richest sources of mineral production.

### SUPERVISION OF MINING.

The general supervision of the mining industry in the State and the administration of the enactments relating to mining are functions of the Department of Mines under the control of a responsible Minister of the Crown. In the mining districts Wardens' Courts, each under the sole jurisdiction of a Warden, determine suits relating to the right of occupation of land for mining and other matters in regard to mining operations.

The occupation of land for the purpose of mining is subject to the Mining Act of 1906 and its amendments. Any person may obtain a miner's right which entitles the holder, under prescribed conditions, to occupy Crown land, not otherwise exempted, for mining purposes and to mine therein, and to occupy as a residence area, land not exceeding a quarter of an acre within the boundaries of a town or village, or 2 acres elsewhere. A holder of a miner's right may apply also for an authority to prospect on or to occupy exempted Crown lands, and, in the event of the discovery of any mineral, he may be required to apply for a lease of the land or to continue prospecting operations. Such authority may be granted for any period not exceeding twelve months, but the term may be extended upon application to two years to enable completion of prospecting operations. Another form of occupation of Crown land in connection with mining is under the right conferred by a business license, which entitles the holder to occupy a limited area within a gold or mineral field for the purpose of carrying on any business except mining.

A business license confers the right to only one holding at a time. Holders of miners' rights may take possession of more than one tenement, but are required to hold an additional miner's right in respect of each tenement after the first of the same class. The term of a miner's right or business license is not less than six months and not more than twenty years. It may be renewed upon application, and is transferable by endorsement and registration. The fee for a miner's right is at the rate of 5s. per annum, and for a business license £1 per annum, or one-half the annual fee for six-monthly terms.

The number of miners' rights issued in New South Wales increased from an annual average of 8,943 in the quinquennium 1925-29 to 15,516 in 1930 and to 27,701 in 1931, which was the largest number in any year since 1897. The number then decreased, and was 15,727 in 1935, and 12,463 in 1936. Business licenses issued numbered 226 in 1935, and 236 in 1936. The number declined in nearly all the years since 1906.

Crown lands may be granted as mining leases, which authorise mining on the land, or as leases for mining purposes which authorise the use of the land for conserving water, constructing drains, etc., and railways, erecting buildings and machinery and dwellings for miners, generating electricity, dumping residues, and for other works in connection with mining, but do not allow mining or the removal of minerals from the land. Except in the case of special leases, which may be granted in certain cases, the maximum area of a mining lease varies according to the mineral sought, viz., opal,  $\frac{1}{2}$  acre; gold, 25 acres; coal, shale, mineral oils, petroleum, or natural gas, 640 acres; other minerals, 80 acres.

Private lands are open to mining subject to the payment of rent and compensation and to other conditions as prescribed. The mining wardens may grant to the holders of miners' rights authority to enter private lands, but, except with the consent of the owner, the authority does not extend to land on which certain improvements have been effected, *e.g.* cultivation, or the erection of substantial buildings. An authority may be granted for a period up to two years, and during its currency the holder may apply for a mining lease of the land. Leases of private lands for mining purposes may be granted also. The maximum areas of private lands that may be leased are:—Gold, 25 acres; opal, 150 ft. square; coal and shale, 640 acres; and other minerals, 80 acres. The owners of private lands, with the concurrence of the Minister for Mines, may lease areas under agreement to holders of miners' rights.

Dredging leases may be granted in respect of Crown and private lands, including the beds of rivers, lakes, etc., and land under tidal waters.

#### *Land occupied for Mining.*

The area under mining occupation in New South Wales at 31st December, 1936, was approximately 458,938 acres, as shown below, as against 589,622 acres in 1934 and 539,921 acres in 1935. The area is not stated definitely, as the area held under miners' rights is estimated by the mining registrars in some cases, where the holders are not required to register the areas they occupy.

Nature of Holding.	1936.		
	Crown Lands.	Private Lands.	Total.
Leases—	acres.	acres.	acres.
Mining ... ..	166,528	94,836	261,364
Mining Purposes ... ..	6,913	1,751	8,664
Agreements ... ..	...	47,451	47,451
Authority to Enter ... ..	...	47,372	47,372
Authority to Prospect ... ..	5,424	...	5,424
Miners' Rights and Business Licenses ... ..	7,629	...	7,629
Applications for Leases—			
Mining ... ..	9,460	3,907	13,367
Mining Purposes ... ..	320	112	432
Dredging ... ..	8,496*	...	8,496
Applications for Authority to Prospect ... ..	58,017	...	58,017
Other Mining Titles ... ..	722	...	722
Total ... ..	263,509	195,429	458,938

\* Includes Private lands.

The annual rent for mining leases of Crown lands is 2s. per acre, and of private lands 20s. per acre in respect of the surface actually occupied. The rent for dredging leases is 2s. 6d per acre in respect of Crown lands, and it is assessed by the wardens in open court in respect of private lands.

Royalties are payable to the Crown in respect of the minerals won, except in certain cases where they have been obtained from private lands held without reservation of minerals to the Crown. The royalty on coal and shale is charged at the rate of 6d. per ton, and on other minerals at the rate of 1 per cent. of the value.

In regard to mining on private lands held without reservation of minerals to the Crown, royalty is collected by the Department of Mines on behalf of the owner at the rate of 6d. per ton of coal and shale, and 1½ per cent. of the gross value of other minerals, except gold. The Department retains one-sixth and one-ninth respectively of these amounts, and pays the balance to the owner of the minerals. The royalty on gold is payable to the Crown in all cases.

Royalty may be remitted under certain conditions as prescribed by the Mining Acts, *e.g.*, if the gross annual output of minerals, other than coal and shale, won from Crown land under mining lease does not exceed £500. In many cases rents may be deducted from the royalties.

The amount of royalty received during the year 1935 was £164,286, of which £2,506 was in respect of output under permits, and the balance from land under lease. The royalty received in 1936 amounted to £237,913, of which £2,714 was paid in respect of output under permits.

#### ENCOURAGEMENT OF PROSPECTING.

The State Legislature usually votes a certain sum each year to encourage prospecting for minerals and to assist miners to open up new fields. The vote is administered by the Prospecting Board, which consists of the Under-Secretary for Mines as Chairman, the Government Geologist, the Chief Inspector of Mines, an inspector, the Chief Mining Surveyor, and a geological surveyor. Miners desiring a grant must satisfy the Board that the locality to be prospected is likely to yield the mineral sought, and that the mode of operation is suitable for its discovery. The amount advanced must be refunded in the event of the discovery of payable mineral by means of the aid.

The following statement shows a summary of the amounts allotted from the Prospecting Vote (or other funds provided for that purpose) to prospectors for the various minerals:—

Period years ended 30th June).	Amounts allotted to Prospectors for—						Total.
	Gold.	Silver and Lead.	Copper.	Tin.	Coal.	Other Minerals.	
	£	£	£	£	£	£	£
1887-1900	245,791	13,026	9,267	4,684	4,090	7,587	284,445†
1901-1905	80,636	5,108	10,136	7,828	40	1,430	105,178†
1906-1910	38,822	7,986	20,765	3,146	310	871	71,900†
1911-1915	50,209	7,557	8,939	5,870	...	4,837	77,412†
1916-1920	32,976	4,325	10,057	3,978	90	5,829	57,255†
1921-1925	44,926	8,009	3,709	8,478	1,713	4,578	71,413†
1926-1930	36,780	12,027	3,582	12,293	1,055	6,395	72,132†
1931	25,070	836	17	545	...	150	26,618*
1932	728	...	...	...	...	50	778†
1933	21,773	369	...	762	...	309	23,013‡
1934	18,162	131	...	693	...	646	19,632‡
1935	28,726	69	...	1,231	...	1,331	31,357§
1936	30,044	360	...	2,034	..	2,092	34,530§
Total ...	654,643	59,803	66,472	51,342	7,298	36,105	875,663

† Wholly from prospecting votes.

\* Includes £10,068 from Unemployment Relief Funds.

‡ Wholly from Unemployment Relief Funds. § Partly from Unemployment Relief Funds and partly from Commonwealth Grant.

In each year some of the prospectors fail to complete the works for which aid has been granted, and the amounts allotted are not paid in full. The total amount expended from Prospecting Votes appropriated from Consolidated Revenue Fund was £634,035 at the end of 1932. No Prospecting Vote has been appropriated since 1931-32.

In addition to assistance afforded by means of the Prospecting Vote, sums have been expended from the Unemployment Relief Fund for the purpose of encouraging prospecting as a measure of unemployment relief, and portion of a grant by the Commonwealth Government has been utilised in encouraging prospecting. Funds provided in recent years for allotments by the prospecting Board from the Unemployment Relief Fund and from the Commonwealth grant have been included in the foregoing table. With the object of encouraging unemployed persons to engage in prospecting, provision was made for the payment of an amount of £1 per week to such persons. The sums expended in this way amounting to £33,298 in 1930-31, to £9,091 in 1932-33, to £461 in 1933-34, and to £4,116 in 1934-35, are not included in the table.

The Government of New South Wales has promised a bonus of £10,000 for the production of 100,000 gallons of petroleum in the State, and has offered for the discovery of a new mineral field rewards ranging up to £1,000 according to the output and to the number of miners employed by the discovery. Claims for rewards are considered by the Prospecting Board who allotted £250 in 1932 and £500 in 1934.

The Commonwealth Government has provided financial assistance over a series of years to encourage prospecting and the development of mineral resources. In 1926 the sum of £60,000 was set aside for the encouragement of prospecting for petroleum oil in Australia, New Guinea and Papua. The amount was increased subsequently to £210,000, of which £203,598 had been expended at 30th June, 1936, including £3,987 in 1935-36. Further provision of assistance in the search for petroleum oil was made in 1936 by the setting aside of £250,000 for the purpose of making advances to persons engaged in drilling operations and the conduct of geological surveys. The purchase of drilling plants and their hire by persons engaged in drilling operations was also sanctioned. The expenditure incurred to 30th June, 1936, was £254 in respect of administrative expenses. Information relating to Governmental measures designed to aid in the development of shale oil deposits is shown on page 508. Provision for the assistance of persons engaged in prospecting for precious metals in Australia was made by the Commonwealth Government in 1926, when £40,000 was paid into a Trust Fund. There was no expenditure from the fund during 1935-36, at the end of which year total disbursements amounted to £26,107. Grants made by the Commonwealth to States in order to stimulate mining and thus absorb unemployed amounted to £423,750 in the three years 1934-35 to 1936-37. The amount allocated to New South Wales was £62,100.

The Government of the Commonwealth has made provision for the payment of a bounty on gold in terms of the Gold Bounty Act, details of which are shown on page 496.

In terms of an arrangement between the Government of the Commonwealth and the Empire Marketing Board, as representing the Imperial Government, certain areas in New South Wales were prospected by geo-physical methods in 1928 and 1929, and the surveys showed generally that these methods may be applied successfully.

## PRICES OF METALS.

The prices of the principal metals depend on market conditions in oversea countries, the local demand being small. The quotations in the following table for silver, copper, and tin are the average spot prices on the London Exchange, and for lead and spelter the mean of spot and forward prices. The prices are quoted in sterling.

Year.	Silver (Standard)	Lead* (Soft, Foreign)	Spelter.*	Copper (Standard).	Tin (Standard).
	per oz. s. d.	per ton. £ s. d.	per ton. £ s. d.	per ton. £ s. d.	per ton. £ s. d.
1901	2 3-2	12 10 5	17 0 7	66 19 8	118 12 8
1911	2 0-6	13 19 3	25 3 2	56 1 9	182 13 5
1921	3 0-9	22 14 4	26 4 1	69 8 7	165 6 7
1926	2 4-7	31 2 3	34 2 8	58 0 8	291 3 0
1929	2 0-5	23 4 11	24 17 8	75 9 7	203 18 10
1930	1 5-7	18 1 5	16 16 9	54 13 7	141 19 1
1931	1 2-6	13 0 7	12 8 11	38 7 9	118 9 1
1932	1 5-9	12 0 9	13 13 10	31 14 8	135 18 11
1933	1 6-1	11 16 1	15 14 11	32 11 4	194 11 11
1934	1 9-2	11 1 0	13 15 6	30 6 5	230 7 5
1935	2 4-9	14 5 8	14 3 6	31 18 1	225 14 5
1936	1 8-1	17 12 7	14 10 10	38 9 7	204 12 8
1937—Jan.	1 8-7	27 4 3	21 4 4	51 10 10	229 9 10
Feb.	1 8-1	28 6 6	25 4 5	59 5 6	233 19 8
March	1 8-7	33 0 1	33 5 11	72 8 11	283 5 7
April	1 8-7	25 18 11	26 5 7	62 12 2	267 8 8
May	1 8-3	23 18 11	23 4 7	61 4 8	250 17 0
June	1 8-0	22 16 4	21 9 5	55 15 6	249 10 11

\* Average of Spot and Forward prices.

There was an almost continuous fall in the sterling prices of metals from 1926 until the second half of 1931. In 1931 the average price of silver (14.6d. per oz.) was lower than any annual average during the previous ninety-five years, and in February, 1931, it fell below 12½d. per oz. The prices of lead, zinc, copper and tin fell below pre-war level in 1930. On 21st September, 1931, an embargo was placed on the export of gold from Great Britain and, with the depreciation of sterling, prices of metals expressed in sterling rose temporarily. The average exchange value of sterling depreciated to 69.2 per cent. of its former gold parity in December, 1931, but rose to 76.6 per cent. in April, 1932, and then depreciated with some fluctuation to approximately 60 per cent. Since 1931, the course of metal prices has been subject to many diverse influences. The prices of lead and copper continued to decline with minor fluctuations, and were at lower levels in 1934; the price of spelter rose during 1932 and 1933, but there was partial recession in 1934. In 1935 the prices of all three metals commenced to rise, they eased slightly early in 1936, with the exception of copper, and then rose steeply until March, 1937. The average prices of lead and spelter in this month were higher than the average prices attained in any month since 1926, and of copper since 1929. The sharp decline during the period April to June, 1937, was relatively more severe in the case of lead and spelter than in copper. Special measures adopted in respect of tin and silver have, to a great extent, governed the prices of those metals.

By reason of its non-association with other metals and its occurrence in commercial quantities in only a few countries which are not large consumers, the production of tin is specially susceptible to regulation. A scheme of control was first attempted in 1930 on a voluntary basis. In March, 1931, measures were instituted for the restriction of tin production

under the supervision of the International Tin Committee. The scheme was first sanctioned by the Governments of the Federated Malay States, Dutch East Indies, Nigeria and Bolivia, and at a later date by the Government of Siam, when the proportion of the world's tin production subject to control was estimated at 95 per cent. Subsequently, other tin-producing countries of less importance, in which there had been some expansion of output, entered the scheme. Production quotas assigned to the various countries were reduced on successive occasions until in June, 1932, the annual rate of production represented about one-third of the output during 1929, which was adopted as a standard tonnage. As a result of curtailed production, the withdrawal from the market of substantial stocks by the International Tin Pool (formed for that purpose in August, 1931), and improved demand, the price of tin rose sharply from March, 1933. Output quotas which, in 1935, increased from 45 per cent. in June quarter to 80 per cent. in December quarter, were, in 1936, 85 per cent. in June quarter, 90 per cent. in March and September quarters, and 105 per cent. in December quarter. The average monthly price of tin declined during the greater part of this period from £227 14s. 3d. per ton in June, 1935, to £220 5s. 7d. in December, 1935, and to £183 6s. 11d. in June, 1936, which was the lowest price since April, 1933. It increased in the following months to £201 7s. 3d. in October, 1936, and thence to £231 0s. 11d. in November, 1936, upon agreement being reached regarding renewal of the control scheme to regulate production. Under the new control scheme, which is to remain in force for a period of five years from the beginning of 1937, the standard tonnage was increased from 173,661 tons to 199,850 tons and the quotas fixed for the March and June quarters, 1937, were 100 per cent. of the new standard. In March, 1937, after four months of relative stability, the price of tin participated in a general rise of base metal prices and increased by £49 5s. 11d. to £283 5s. 7d. per ton, the highest average price in any month since August, 1927. In common with other metals, however, the price of tin declined subsequently and was £249 19s. 11d. in June, 1937.

The price of silver declined gradually from 5s. per oz. in 1870 to 2s. per oz. in 1902, and was then fairly steady until an increase occurred in 1916. In 1918 the price of silver in London was subject to regulation by the Imperial Government, and when decontrolled in May, 1919, it rose to 7s. 6d. per oz. in February, 1920. Thereafter the price declined until 1931. The protracted decline in price was due largely to lessened demand which resulted from the demonetisation of silver by a number of important countries, and to the increased supplies of the metal thereby released for other than monetary purposes. The production of a substantial proportion of the world's silver output as a by-product of other metals also led to increased supplies as prices of copper, lead and zinc remained favourable.

In July, 1933, a Silver Agreement was concluded between the major producing and the principal silver-using countries. The Agreement, which has a term of four years from 1st January, 1934, is designed to mitigate fluctuations in the price of silver, and to that end the Governments of India, China and Spain agree to limit sales from monetary stocks, and the Governments of Australia, Canada, the United States, Mexico and Peru undertake not to sell silver and to buy or otherwise withdraw from the market a fixed annual quantity of the silver produced in their respective countries.

The movements in the price of silver since the second half of 1934 and in 1935 may be attributed to the policy pursued by the United States. At the end of 1933 the United States Government undertook to buy newly-mined domestic silver at a price considerably in advance of the current market rate,

and in May, 1934, passed the Silver Purchase Act authorising the purchase of silver until such time as one-fourth of the total monetary reserves of the United States consists of silver. Largely as a consequence of the operations of the United States Government, the price of silver rose steeply to an average of 2s. 9.9d. in May, 1935, but, influenced by a modification of United States policy, it subsequently declined, at first gradually to 2s. 5.3d. in November, 1935, and then sharply to 2s. 1.6d. in December, 1935, and to 1s. 8.2d. in January, 1936. The price varied slightly during 1936 and the first half of 1937.

#### PRICES OF COAL.

Prices of coal depend to a great extent upon local factors. The western coal, being of lower calorific value than the northern or southern, is the cheapest. The movement in prices since 1916 is illustrated by the following comparison, which was published in the report of the Royal Commission which investigated the coal industry in 1929-30. The quotations refer to the best large coal per ton in each district in the years in which the prices were varied between 1916 and 1930.

Year.	Northern— f.o.b., Newcastle.	Southern— f.o.b., Jetty.	Western— f.o.r., Lithgow.
	s. d.	s. d.	s. d.
1916 ... ..	12 0	12 0	7 3
1917 ... ..	15 0	15 0	10 3
1919 ... ..	17 9	17 6	12 9
1920 ... ..	21 9	21 6	16 9
1927 ... ..	26 1	25 6	15 6
1930 (June) ...	22 10	22 3	13 9

The prices quoted above were observed generally throughout the trade up to June, 1930. Subsequently competition rapidly intensified and prices fell continuously. Contracts for large supplies were undertaken at continually lower rates—the reductions ranging from 5s. to 8s. per ton as compared with those stated for June, 1930.

#### STATISTICS OF MINES.

The statistics relating to the mining industry as published in this chapter are obtained from two sources: (1) returns for 1921 and later years collected from mine-owners by the Government Statistician under the authority of the Census Act, 1901; (2) the records of the Department of Mines, which, until the year 1921, were the only data available. The principal distinction between the data obtained from these two sources lies in the statistics of the metalliferous mines. The particulars recorded by the Department of Mines relate to metals won during each year, including in many instances those won from minerals brought to grass in previous years, whereas the Statistician collects returns of the minerals actually mined during the year.

Moreover, the statistics collected by the Department of Mines sometimes include particulars of ore-dressing operations, and the use of the Department's figures for years prior to 1921 involved duplication in regard to the mining and manufacturing industries. In order to obviate this difficulty, the mine owners were asked to supply special returns to the Government Statistician, showing therein information relating to mining operations only, and excluding all particulars regarding the treatment of ores. It is found, however, that it is almost impossible to give separate details regarding the actual operations of mining, especially when the same company undertakes both mining and ore-dressing, and it is under such conditions that the most important branch of metalliferous mining in New South Wales—viz., silver, lead, and zinc—is usually conducted.

Further difficulty arises in regard to the value of the annual output of the metalliferous mines. The value at the mines and before treatment cannot be determined until the minerals have been subjected to the final process for the extraction of the metallic contents, and such operations extend over a long period and in some cases are conducted in localities outside the State. In view of these difficulties the value of the production of metalliferous mines can be calculated only approximately, and attention is directed to the fact that the values as stated in this Year Book are to be regarded as estimates.

The statistics of mines, other than metalliferous, as recorded for years prior to 1926, include particulars of quarries held under mining title. In the compilation of the returns collected for 1926 and later years, these have been excluded from the statistics of the mining industry; therefore, the figures are not strictly comparable with those for the earlier years.

#### LABOUR AND MACHINERY.

Mining leases and permits contain conditions as to the minimum number of men to be employed. The usual labour conditions in respect of mining leases of Crown lands and of leases or agreements to mine on private lands are as follows:—For coal, shale, mineral oils, petroleum, or natural gas, for first twelve months of term granted, 2 men to 320 acres, thereafter 4 men; for gold, 1 man to 10 acres throughout the full term; for other minerals, 1 man to 20 acres during the first year, thereafter 1 man to 10 acres. For dredging leases the prescribed labour is in the proportion of 7 men to 100 acres. The labour conditions may be suspended in cases where low prices for the products or other adverse circumstances affect the working of a mine.

The approximate number of men employed in mining in various years since 1921 is indicated in the following statement. The number of miners is the sum of the average number employed at each mine in operation during the year, and the number of "fossickers" represents the number engaged, as reported by the wardens in the various mining districts.

Particulars.	1921.	1926.	1930.	1933.	1934.	1935.	1936.
Miners—							
Coal ... ..	20,973*	24,125	21,343†	12,910	13,245	12,788	13,515
Metals—							
Gold ... ..	900	378	252	1,160	1,321	1,626	1,561
Silver, Lead, Zinc...	2,035	3,272	2,996	2,167	2,304	2,429	3,022
Tin ... ..	826	671	255	375	573	618	520
Copper ... ..	68	62	4	2	7	2	2
Other Metals ... }	810†	419	59	167	174	175	48
Other Minerals ... }		259	101	152	192	226	222
Total, Metalliferous, etc.	4,630†	5,061	3,667	4,023	4,571	5,076	5,375
Total, Miners ... ..	25,612†	29,186	25,010	16,933	17,816	17,864	18,890
Fossickers—							
Gold ... ..	52	464	3,706	8,350	5,290	4,550	3,827
Tin ... ..	343	551	438	1,035	1,429	1,260	1,340
Other ... ..	55	228	600	623	223	207	147
Total, Fossickers	450	1,243	4,744	10,008	6,942	6,017	5,314

\* Includes 189 shale miners.

† Overstated—see context below.

‡ Includes workers in quarries held under mining title, excluded in later years.

There is some overstatement in regard to the number of coal miners as shown above for the year 1930, owing to duplication arising from the movement of miners during the period March, 1929, to June, 1930, when the majority of northern collieries were closed.

The number of persons engaged in coal mining declined rapidly between 1930 and 1933, and has since increased but slightly. In other branches of mining, during the period for which comparable figures are available, the number declined from 5,061 in 1928 to 2,848 in 1931 and then increased progressively to 5,375 in 1936. The most notable increases were in gold mining, and silver, lead and zinc, for which persons employed in 1931 were 520 and 1,755, respectively. The rapid expansion in gold mining was due to a condition of wide-spread unemployment, Government encouragement of prospecting as a relief measure, and the effect of the high premium payable on gold as from 1931. Increased activity in silver, lead and zinc mines followed upon enhancement of prices.

Additional information regarding miners is shown in the following statement:—

Year.	Coal Mines.				Other Mines.			
	Working Pro-prietors.	Employees above ground.	Employees below ground.	Total.	Working Pro-prietors.	Employees above ground.	Employees below ground.	Total.
1921†	5,385		15,588	20,973†	2,353*		2,286*	4,639*
1926†	73	6,130	17,922	24,125	292	1,654	3,115	5,061
1929†	137	5,522	16,811	22,470	222	981	2,889	4,092
1930	198	5,020	14,872	20,090	227	807	2,758	3,792
1931	178	4,047	11,583	15,808	472	765	1,739	2,976‡
1932	196	3,464	9,916	13,576	616	1,092	1,977	3,685‡
1933	284	3,219	9,461	12,964	727	1,189	2,210	4,126
1934	286	3,161	9,899	13,346	746	1,452	2,518	4,716
1935	241	3,069	10,018	13,328	816	1,712	2,687	5,215
1936	244	3,141	10,484	13,869	702	1,639	3,011	5,352

\* Including workers in quarries held under mining title, excluded in later years.

† Average number. In subsequent years the number employed on last full working day is shown.

‡ Includes shale miners.

The employment of boys under 14 years of age and of women and girls in or about a mine is prohibited, and restrictions are placed upon the employment of youths. In 1935 the number of employees under 21 years of age employed on the last full working day in coal mines was 936, of whom 586 worked below ground and 350 on the surface. In 1936 the respective numbers were 980, 593, and 387. At other mines in the same years the employees under 21 years of age numbered 79 and 54, of whom 11 and 6 worked below ground in the respective years.

The value of the machinery used in connection with mining in New South Wales during the year 1936 was £7,378,698, viz., coal mines £6,399,424, metalliferous mines, £948,732, and other mines, £30,542. The value in 1921, 1926, and in each of the last six years is shown below:—

Year.	Coal and Shale Mines.	Metalliferous Mines.	Other Mines.	Total
	£	£	£	£
1921	6,636,857†	1,481,966†	*	8,118,823†
1926	7,747,139	947,911	41,858	8,736,908
1931	6,736,886	699,679	17,025‡	7,453,590
1932	6,819,784	864,514	14,194‡	7,698,492
1933	6,683,451	843,637	17,032	7,544,120
1934	6,478,492	872,784	18,671	7,369,947
1935	6,530,433	979,515	22,152	7,532,101
1936	6,399,424	948,732	30,542	7,378,698

\* Included with metalliferous mines.

† Including machinery in quarries held under mining title, excluded in later years.

‡ Includes Shale mines.

The value of the machinery used in mining for the various metals during 1935 and 1936 was as follows:—Gold, £211,440 and £192,295; silver, lead and zinc, £608,582 and £633,514; tin, £139,514 and £120,496; other metals, £19,979 and £2,427, respectively.

The following statement shows separately the value of the plant used in actual mining operations, that is, in winning and weighing the minerals, hauling them to the surface, ventilating the mines, etc.; and the value of the conveyance plant for transporting the minerals from the surface to wharf or railway:—

Year.	Coal Mines.			Other Mines.			Total Value of Mining Machinery.
	Mining Operations.	Transporting Minerals to Wharf or Railway.	Other Machinery.	Mining Operations.	Transporting Minerals to Wharf or Railway.	Other Machinery.	
	£	£	£	£	£	£	£
1921†	3,614,955	2,561,172	460,730	924,870*	122,481*	434,615*	8,118,823*
1926	4,524,850	2,880,051	342,238	796,461	110,820	82,488	8,736,908
1931†	3,954,708	2,528,302	253,376	680,616	14,531	21,557	7,453,590
1932†	4,011,720	2,569,278	238,786	849,020	11,843	17,845	7,698,492
1933	3,913,143	2,516,832	253,476	809,236	15,376	36,057	7,544,120
1934	3,812,393	2,419,501	240,598	843,586	16,558	31,311	7,369,947
1935	3,880,682	2,388,024	261,727	916,072	24,427	61,169	7,532,101
1936	3,832,433	2,317,492	249,499	917,947	11,647	49,680	7,378,698

\* Including particulars of quarries held under mining title which were excluded in later years.

† Shale mines included with coal mines in 1921 and with other mines in 1931 and 1932.

In the coal mines, the value of the machinery employed in mining operations during 1936 represented 60 per cent. of the total value; 36 per cent. was used for transporting the minerals from the surface of the mine to a wharf or railway station. In other mines the proportions were as follows:—Mining operations, 94 per cent.; transporting minerals, 1 per cent. In some cases mine owners have constructed railway lines for the purpose of connecting the mines with the State railway system or with wharves.

Particulars of the power used for operating mining machinery during 1921, 1926 and each of the last six years are shown below:—

Year.	Horse power of Machinery—Average used.						
	Coal Mines.			Other Mines.			Total, all Mines.
	Steam.	Elec- tricity.	Other.	Steam.	Elec- tricity.	Other.	
1921†	47,321	16,138	113	12,136*	1,931*	593*	78,232*
1926	62,691	23,008	511	13,847	2,632	533	103,222
1931†	49,436	22,907	86	3,350	1,528	494	77,801
1932†	42,264	25,309	185	3,790	1,644	1,703	74,895
1933	40,949	24,762	375	4,048	2,325	1,884	74,343
1934	36,880	26,615	200	5,627	2,824	2,604	74,750
1935	35,577	26,554	234	6,690	3,158	2,913	75,126
1936	35,710	26,676	264	6,111	3,724	3,041	75,526

\* Including particulars of quarries held under mining title, excluded in later years.

† Shale mines included with coal mines in 1921 and with other mines in 1931 and 1932.

Steam is the principal agency used for operating the machinery. In coal mines the average motive force actually used in 1936 amounted to 62,650 horse-power, of which 57 per cent. was steam and 42 per cent. electricity. The quantity of coal cut by machines during 1935 was 1,968,439 tons, or 22.6 per cent. of the total output, and 2,469,662 tons were cut in 1936,

representing 26.8 per cent. Of 225 machines in use in 1936, 114 were operated by electricity and 111 by compressed air. Filling coal by mechanical means was commenced during 1935 and 13,692 tons of coal were filled in this manner. In 1936, the quantity of coal filled mechanically was 134,458 tons.

In mines other than coal mines, steam power represented 48 per cent. in 1936, electricity, 29 per cent., and oil 22 per cent. of the power used. The use of oil increased as a result of the installation of oil-burning machinery in metalliferous mining at Broken Hill in 1930. A number of the mining companies at this locality have erected a central power station for the supply of electrical power and compressed air to the mines. The plant was brought into operation during 1931.

The full capacity of mining machinery in 1935 amounted to 122,228 and in 1936 to 123,945 horse-power, viz., 102,339 and 103,371 horse-power in coal mines and 19,889 and 20,574 horse-power in other mines.

The value of fuel used during 1935 was £314,346, including 217,708 tons of coal valued at £121,263, and electricity to the value of £158,632. In 1936 fuel to the value of £322,974 was used, of which coal (236,863 tons) and electricity were valued at £140,298 and £155,046 respectively.

#### MINES IN OPERATION.

The following statement is a summary of the particulars furnished by mine owners in returns under the Census Act regarding the mines in operation and the minerals mined during 1921, 1926, and each year from 1928 to 1936. The figures are selected statistics and are not a complete record of either the income or expenditure of the undertakings concerned:—

Year.	Mines in Op-eration.	Persons Employed (average, excluding Fossic-kers).	Value of—				
			Salaries and Wages.	Land, Buildings, etc.	Machinery and Plant.	Materials and Fuel Used, etc.	Output.
	No.	No.	£	£	£	£	£
1921*	493	25,612	6,430,988	3,428,735	8,118,823	1,770,320	10,191,975
1926	427	29,186	7,511,862	4,224,676	8,736,908	2,266,410	12,084,083
1928	367	25,551	6,464,788	4,081,725	7,798,545	1,718,760	10,435,522
1929	369	26,562	5,242,393	3,981,000	7,939,024	1,343,510	8,832,874
1930	377	25,010	4,856,579	3,991,991	7,608,630	1,280,654	7,498,565
1931	431	18,370	3,838,763	3,724,217	7,453,590	962,370	5,706,425
1932	496	17,721	3,797,055	3,737,169	7,698,492	1,020,403	5,663,552
1933	569	16,933	3,835,077	3,618,890	7,544,120	949,152	5,848,699
1934	599	17,816	4,181,366	3,591,271	7,369,947	1,033,354	6,363,107
1935	668	17,864	4,560,844	3,742,941	7,532,101	1,093,774	6,991,974
1936	592	18,890	4,895,850	3,666,585	7,378,698	1,176,732	8,429,114

\* Including particulars (excluded in later years) of quarries held under mining title.

The figures in the table include the value of minerals won by fossickers, who numbered 6,017 in 1935 and 5,314 in 1936, and obtained an output valued at £147,390 and £143,874 in the respective years. Fossicking for minerals increased sharply in 1931 and did not decline until after 1933, in which year the output of 10,008 fossickers was valued at £147,583. Although the number fell to 6,942 in 1934, a maximum value of output of £164,092 was won. The cost of replacing tools worn out each year and of repairing plant, machinery, etc., is included with the value of materials and fuel used, but many other costs and overhead charges are not included.

Coal mining is the principal mineral industry of New South Wales, as 58 per cent. of the value of minerals produced in 1936, and 70 per cent. during the past five years, was represented by coal. Coal mining in New

South Wales, as in other countries, is liable to intermittency, owing to various causes, and in recent years the industry has been affected by reason of the more extensive use of oil in the development of power. Particulars of interruptions to work in the principal collieries over a series of years are shown in the chapter of this volume relating to employment.

In 1928 serious depression was apparent in the coal trade, due mainly to diminished demand for export, and practically all the northern collieries were idle on account of an industrial dispute from 1st March, 1929, to 2nd June, 1930. The value of the output was reduced also by reason of a fall in price. In 1931 there was a further decline in both output and prices, but in subsequent years production increased steadily while prices were subject to further decline.

Apart from coal mining the output of the Broken Hill silver-lead fields is the most important mining activity in the State. In 1921 conditions were unfavourable as prices of metals were low. Moreover, operations at some of the mines were suspended for the greater part of the year in consequence of the partial destruction by fire of the smelting works in South Australia where the products are treated. Between 1921 and 1926 there was a rise in metal prices and a steady increase in the value of the output of the metalliferous mines. A drop in the prices which commenced during 1926 led to a decrease in output in later years. From 1931 the value of metal output rose slowly until 1936 when, influenced by a substantial rise in prices, it surpassed the value in 1926.

Summaries relating to coal mines and to other mines are shown below:—

Year.	Mines in Opera- tion.	Persons Employed (excluding Fossilifers). ¶	Salaries and Wages.	Value of—			
				Land, Buildings, etc.	Machinery and Plant.	Materials and Fuel Used, etc.	Output.

Coal Mines.							
	No.	No.	£	£	£	£	£
1921†	143	20,973	5,703,999	3,222,721	6,636,857	1,469,578	9,036,474
1926	141	24,125	6,058,270	3,999,836	7,747,139	1,496,436	9,096,611
1928	153	21,743	5,317,243	3,883,349	6,989,492	1,221,027	8,113,600
1929	180	22,470†	4,053,746	3,778,955	7,127,140	824,940	6,294,870
1930	216	21,343†	3,731,380	3,804,875	6,932,874	797,689	5,493,150
1931	169	15,522	3,222,379	3,541,988	6,736,886	654,319	4,441,335
1932	169	14,126	3,022,474	3,548,298	6,819,784	587,446	4,076,108
1933	194	12,910	2,972,712	3,412,274	6,683,451	530,541	4,106,613
1934	169	13,245	3,143,158	3,368,189	6,478,492	556,313	4,342,235
1935	161	12,788	3,379,312	3,516,082	6,530,433	584,737	4,585,351
1936	160	13,515	3,492,308	3,465,285	6,399,424	613,305	4,920,908

Other Mines.							
	No.	No.	£	£	£	£	£
1921*	350	4,639	726,989	206,014	1,481,966	300,742	1,153,502
1926	286	5,061	1,453,592	224,840	989,769	769,974	2,937,471
1928	204	3,808	1,147,545	198,376	809,053	497,733	2,321,925
1929	189	4,092	1,188,647	202,045	811,884	521,579	2,538,002
1930	161	3,667	1,125,199	187,116	675,756	482,965	2,005,416
1931†	262	2,848	616,384	182,229	716,704	308,051	1,265,092
1932†	327	3,595	774,581	188,871	878,708	432,957	1,587,444
1933	375	4,023	862,365	206,616	860,669	418,611	1,742,080
1934	430	4,571	1,038,208	223,082	891,455	477,041	2,020,874
1935	507	5,076	1,181,532	226,859	1,001,668	509,037	2,406,623
1936	432	5,375	1,403,542	201,300	979,274	563,427	3,508,206

\* Including particulars of quarries held under mining title, excluded in later years. † See page 488.  
 ‡ Includes shale mines. ¶ Average number.

The amount of wages, as shown in the foregoing tables, includes the value of explosives sold to employees, viz., coal miners £109,645, and other miners £49,454, making a total amount of £159,099 in 1935. The value of explosives included in 1936 was: coal miners £110,321, other miners £52,911, total, £163,232.

The materials used in coal mines in 1935 consisted of timber, £109,631, and other materials, £291,354. The values in 1936 were £117,428 and £311,013 respectively. The value of fuel used was £183,752 in 1935 and £184,864 in 1936.

In other mines the value of timber used in 1935 and 1936 was £185,704 and £191,426 respectively, other materials £192,739 and £233,891, fuel consumed £130,594 and £138,110.

#### MINERALS WON—AS RECORDED BY THE DEPARTMENT OF MINES.

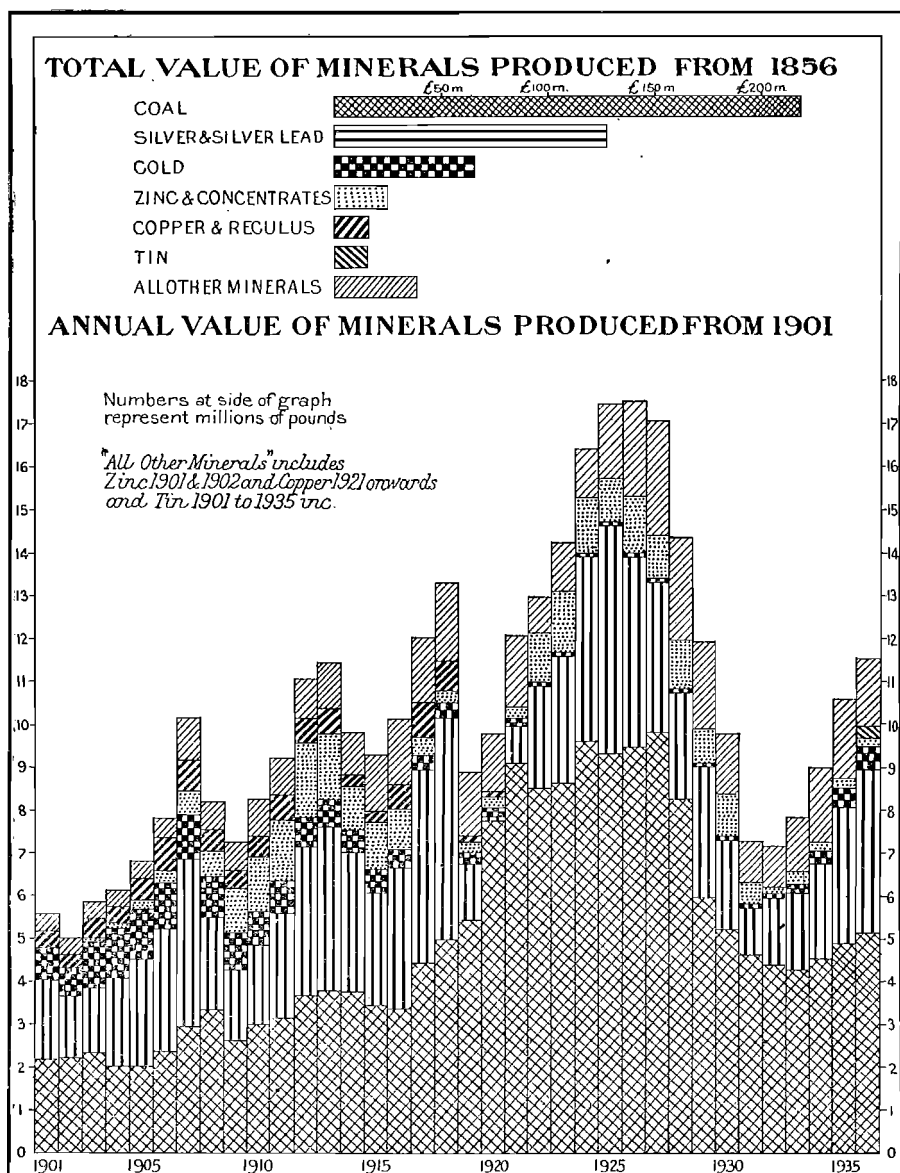
The particulars relating to the minerals won, as shown in the following pages of this chapter, have been obtained from the records of the Department of Mines. For reasons stated on page 487 they differ from those in the preceding tables, and the figures relating to production include, in many cases, the value of the ores after treatment at the mines. From the particulars shown in the annual reports of the Department the output of iron made from scrap, Portland cement, lime, and coke has been deducted, as these items are included in the statistics of factories in the preceding chapter of this volume. The value was £1,843,041 in 1935, and £1,857,402 in 1936.

The average annual value of the minerals won in each quinquennial period from 1901 to 1935, the annual production in certain years since 1928, and the total production to the end of each period are shown below:—

Period.	Value of Minerals Won.		Year.	Value of Minerals Won.	
	Average per annum.	Total to end of period.		During year.	To end of year
	£	£		£	£
To end of 1900	...	132,535,358	1928	14,363,569	430,546,619
1901-05	5,873,176	161,901,240	1929	11,923,515	442,470,134
1906-10	8,330,883	203,555,656	1931	7,281,931	459,533,671
1911-15	10,169,752	254,404,418	1932	7,247,866	466,781,637
1916-20	10,821,478	308,511,806	1933	7,843,057	474,624,694
1921-25	14,622,631	381,624,962	1934	8,995,211	483,619,905
1926-30	14,125,356	452,251,740	1935	10,583,792	494,203,687
1931-35	8,390,391	494,213,697	1936	11,520,205	505,723,902

The total value of £17,509,718 in 1926 was the highest yet recorded. There was a decline of £461,000 in 1927, which may be attributed to a fall in the prices of lead and zinc. In the following years, until 1932, the value declined as a result of depression in the coal-mining industry, and a fall in the prices of the principal metalliferous products. Successive increases in the value since 1932 resulted largely from higher prices for metals obtained from the Broken Hill field, though they were due in part to increased coal and quarry production consequent upon economic recovery.

## MINERAL PRODUCTION IN NEW SOUTH WALES, 1856 to 1936.



Up to the end of the year 1900 the total value of gold won (£48,422,000) exceeded that of any other mineral, but with the subsequent decline in gold mining and the development of the coal and silver-lead fields, coal advanced rapidly to the head of the list, and the value of the silver and lead surpassed the output of gold. At the end of 1936 the total value of the coal production represented 42.99 per cent. of the total value, silver and silver-lead 25.16 per cent., and gold 12.96 per cent.

The values of the ores are estimated after assay. Many of the metals are associated in the same mineral matter and it is very difficult to make a reliable estimate of the quantity and value, especially in cases where the ores are exported before final treatment.

The following statement shows the quantity and value of the various minerals won as estimated for the years 1935 and 1936, also the total yield to the end of 1936:—

Minerals.	Output for year.				Total Output to end of 1936.		
	1935.		1936.				
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
		£		£		£	
Gold ... .. oz. fine	50,102	†439,123	60,739	†525,792	15,224,996	65,541,755	
Silver ... ..	62,198	8,110	56,994	5,142	45,804,660	6,133,863	
Silver-lead ore, etc. ... tons	243,817	3,181,278	255,998	3,815,643	13,058,508	121,088,261	
Lead—Pig, etc. ... "	...	...	...	...	326,621	6,442,397	
Zinc—Spelter and con- centrates ... ..	243,604	230,890	220,767	198,460	8,604,775	25,441,146	
Copper ... ..	856	30,071	1,373	53,687	271,204	15,760,645	
Tin ingots and ore ... "	1,096	287,890	1,114	268,454	140,421	15,799,472	
Iron—Pig (from local ores) ... ..	4,580	18,320	...	...	1,566,449	7,511,755	
Iron oxide ... ..	4,512	2,546	3,440	2,001	102,428	95,555	
Ironstone flux ... ..	...	...	...	...	135,087	109,741	
Chrome iron ore ... ..	595	1,487	415	1,038	42,803	132,254	
Wolfram ... ..	54†	5,694	5†	560	2,488	286,455	
Scheelite ... ..	2†	381	12†	1,631	1,728	196,336	
Platinum ... .. oz.	98	649	47	410	20,140	128,037	
Molybdenite ... .. tons	...	...	3/20	21	846	215,228	
Antimony ... ..	49	780	92	1,772	19,708	369,963	
Manganese ore ... ..	148	444	72	243	37,510	82,401	
Bismuth ... ..	4†	285	1/20	17	891	244,769	
Coal ... ..	8,698,579	4,837,341	9,199,466	5,126,850	403,427,114	217,428,621	
Kerosene Shale ... ..	...	...	...	...	1,925,053	2,695,121	
Alunite ... ..	570	1,069	738	1,384	59,497	211,248	
Arsenic ... ..	370	14,571	122	4,065	(a)	193,990	
Dolomite ... ..	17,919	8,960	19,597	9,799	(a)	132,104	
Limestone flux ... ..	104,953	20,990	118,428	22,349	3,105,865	1,338,567	
Magnesite ... ..	15,688	27,454	17,183	30,070	196,293	306,197	
Diamonds ... .. carats	...	...	650	650	205,043	147,449	
Opal ... ..	...	5,070	...	6,110	...	1,619,438	
Clays ... .. tons	1,939,723	321,906	1,547,134	271,220	}	...	
Building material ... ..	376,561	90,632	486,813	115,162		(a)	*16,071,134
Road material ... ..	...	875,451	...	963,566		...	...
Other ... ..	...	122,400	...	94,019		...	...
Total ... ..	...	10,583,792	...	11,520,205	...	505,723,902	

\* Includes output of quarries under mining title prior to 1925, and of all quarries in later years.

† Value in Australian currency.

(a) Quantity not available.

The production of gold, silver-lead, tin and coal increased during 1936, but there was a decrease in the production of clays, silver and zinc. Notwithstanding increased output, the value of tin was lower than in 1935.

### GOLD.

Though gold had been found in New South Wales in earlier years, the history of gold-mining in the State dates from 1851, when its existence in payable quantities was proved by E. H. Hargraves, and the principal gold-fields were discovered. The deposits which have been mined include various types, *e.g.*, alluvial gold, auriferous reefs or lodes, impregnations in stratified deposits and igneous rocks, and irregular deposits, as in auriferous ironstone.

Many rich alluvial deposits in which gold was easily accessible were exploited during the twenty years 1851-1870; then it became necessary to introduce expensive methods of mining, and the production declined. During the period of general depression which followed the financial crisis of 1893 greater attention was paid to prospecting for minerals, and with the

development of new processes the output of gold showed considerable improvement. In 1904, however, a steady decline commenced, and the yield in 1929, viz., 7,496 oz. fine, was the lowest recorded in any year since 1851. Since 1929 the rise in price of gold and economic stress have attracted greater attention to prospecting, and the yield progressively increased from 7,496 oz. fine in 1929 to 60,739 oz. fine in 1936. Of the gold produced in 1935 and 1936, 4,303 oz. and 5,064 oz. respectively were obtained from the treatment of silver-lead ores from Broken Hill. The value of the output in 1929 was £31,842, and by 1936 it had increased to £258,001 at standard rate, which was the highest value recorded since 1919. Since 1931 gold has been at a substantial premium, so that the values in Australian currency would be expressed by much higher figures than at standard rate, as shown in the table which follows. The prices paid for gold lodged at the Mint are shown at intervals since 1930 in chapter Private Finance of this issue of the Official Year Book.

In terms of the Gold Bounty Act, 1930-31, the Commonwealth Government undertook to pay bounty in respect of gold produced in Australia in each of the ten years 1931 to 1940, in which the production would exceed the average annual production during the three years 1928 to 1930 (approximately 486,000 oz. fine). The rate of bounty in respect of gold produced during the six months, January to June, 1931, was £1 (Australian currency) per ounce of fine gold in excess of half the average annual production, 1928 to 1930. The rate of bounty in respect of subsequent production was calculated on the basis of 10s. (Australian currency) per oz. fine, and was to be increased if the average rate of exchange for telegraphic transfers from Australia to London fell below 30 per cent., viz., by 1s. for each decrease of 3 per cent. in the rate of exchange, the maximum bounty being £1 (Australian currency). The bounty payable on each year's production of gold was distributed amongst the producers in proportion to the quantity produced.

During the year ended June, 1932, bounty amounting to £2,063 was paid in respect of 14,076½ oz. (fine) of New South Wales gold, and from 1st July, 1932, until payment of the bounty was suspended, the sum of £1,864 was received by producers in New South Wales. Under provisions of the Financial Emergency Act, 1932, the payment of the gold bounty was suspended from 30th September, 1932, until such time as the price of the metal falls below £5 per ounce fine in English currency or £5 10s. in Australian currency.

The following table shows the quantity and value of the gold won in New South Wales to the end of 1936:—

Period.	Quantity.	Value.	Period.	Quantity.	Value.*
	oz. fine.	£		oz. fine.	£
1851-1900	11,399,508	48,422,001	1932	27,941	(b) 203,622
1901-1910	2,252,851	9,569,492	1933	29,252	(c) 226,068
1911-1920	1,145,185	4,864,440	1934	36,123	(d) 307,662
1921-1925	133,335	566,375	1935	50,102	(e) 439,123
1926-1930	70,287	298,557	1936	60,739	(f) 525,792
1931	19,673	(a) 118,623	Total	15,224,996	65,541,755

\* Value in Australian currency. Values at standard rate were (a) £83,565, (b) £118,685 (c) £124,254, (d) £153,412, (e) £212,818, (f) £258,001.

Towards the end of the nineteenth century a system of dredging was introduced for the purpose of recovering alluvial gold from the beds of the rivers which drain auriferous country, and in 1900 the quantity obtained by the

dredges was 7,924 oz. of fine gold, valued at £33,660. During the following decade the quantity amounted to 298,416 oz. fine, valued at £1,267,593. Subsequently the output of the dredges declined, until in 1929 it was only 91 oz. fine, but there was an increase to 2,829 oz. fine in 1933 following a decrease from 1,848 oz. fine in 1932 to 1,363 oz. fine in 1934. Dredges are employed also for the recovery of stream tin; particulars are shown on page 501.

#### SILVER, LEAD, AND ZINC.

The production of lead and zinc in New South Wales is associated closely with the mining of silver, the Broken Hill silver-lead deposits being the main source of the output.

The Broken Hill field was discovered in 1883, and it has become one of the principal mining centres of the world. The lode, varying in width from 10 feet to 400 feet, may be traced for several miles. Mining leases held by companies and syndicates extend along its entire length, but operations are confined to an extent of  $3\frac{1}{2}$  miles in the centre. Underneath an outcrop of manganiferous ironstone were found rich oxidised ores, consisting of carbonate of lead and kaolin with silver, and, below these ores, mixed sulphides of lead and zinc with a high silver content. As the depth increased the proportions of silver, lead, and zinc became smaller, and the gangue was found to consist of rhodonite which causes difficulty in the extraction of the metals.

For some years operations were directed towards the recovery of silver in the ores which contained the metal in payable quantities. The other metals were not recovered because the current price for lead was comparatively low and a method had not been devised by which the lead and zinc in the complex sulphide ores could be separated profitably. Consequently huge dumps of residue and low-grade ores accumulated at the mines until the development of new processes for the separation of the sulphides by means of flotation led to their treatment.

Lead and zinc concentrates have been produced in large quantities at Broken Hill. The former contain lead amounting to 60 to 65 per cent., silver 20 to 25 oz. per ton, zinc 7 to 8 per cent., and sulphur 15 per cent. The zinc concentrates contain zinc, about 45 per cent., lead 6 per cent., silver 10 oz. per ton, and sulphur 30 per cent. The lead concentrates are treated at Port Pirie in South Australia. Although the greater part of the zinc concentrates is exported to the United Kingdom and other European countries or to Japan, large quantities are treated in Australia at Risdon, Tasmania.

During 1935 the output of ore from the Broken Hill mines amounted to 1,307,606 tons, valued at £3,479,642, and in 1936 to 1,355,596 tons, valued at £3,972,098.

Another silver field of some importance, known as Yerranderie, is situated in the Burragorang valley. The lodes are small, varying in width from mere threads to 8 feet, but they are exceptionally rich. The bulk of the silver is associated with galena, which contains up to 160 oz. per ton. Second-grade ores contain from 40 to 80 oz. per ton. The Yerranderie field is handicapped by the high cost of haulage along a steeply-graded road to the nearest railway, therefore only first-grade ore is despatched from the mines, the lower grades being stacked for concentration or future treatment. There was no production from the Yerranderie mines in 1932 or 1933 and in

1934 only 96 tons of ore were raised. Production in 1935 and 1936 respectively consisted of 393 tons and 411 tons of ore raised, 45 tons and 13½ tons picked from mullock heaps, and 143 tons and 84½ tons of concentrates yielded from the treatment of slimes.

Smaller silver fields are situated in various parts of the State, and extensive developmental work has been done at Captain's Flat. An Act was passed in 1930 to authorise the construction of a railway to link Captain's Flat with Bungendore on the Sydney to Cooma railway. Workings have been established, but commercial production has not yet been undertaken.

In assessing the quantity and value of the metals won from the silver-lead ores mined in New South Wales, the Department of Mines estimates the total value on the basis of the metal produced within the State and the value of the ore, concentrates, etc., not smelted within the State, as declared by the several companies at the date of export from the State. The following table is a summary of the Department's records of the quantity and value of the silver and lead produced in New South Wales from local ores, and the quantity and value of silver-lead and zinc concentrates produced in the State and despatched elsewhere for treatment:—

Period.	Silver.	Silver-lead Concentrates, Carbonate ore, etc.	Lead-Pig, in Matte, etc.	Zinc Concentrates.
Quantity.				
	oz.	tons.	tons.	tons.
To 1909	9,572,829	3,020,611	14,680	138,901
1901-1905	4,154,020	1,985,868	17,550	183,782
1906-1910	8,310,962	1,751,751	71,435	1,460,138*
1911-1915	12,460,553	1,694,834	114,375	2,093,783
1916-1920	7,982,192	866,654	80,115	553,628
1921-1925	2,960,993	1,013,376	28,466	1,449,599
1926-1930	33,017	1,377,163	...	1,388,821
1931	50,353	172,380	...	220,982
1932	49,309	209,125	...	188,038
1933	55,882	225,445	...	230,952
1934	55,358	241,486	...	231,780
1935	62,198	243,817	...	243,604
1936	56,994	255,998	...	220,767
Total ...	45,804,660	13,058,508	326,621	8,604,775
Value.				
	£	£	£	£
To 1900	1,562,501	28,924,613	274,585	157,066
1901-1905	445,051	8,910,586	255,366	440,402
1906-1910	892,414	11,561,794	996,646	3,761,223
1911-1915	1,302,510	14,302,670	1,899,601	6,861,489
1916-1920	1,426,886	12,920,076	2,358,625	2,195,599
1921-1925	471,312	15,360,784	657,574	5,171,152
1926-1930	3,259	15,498,294	...	5,263,786
1931	3,151	1,076,208	...	512,795
1932	3,683	1,563,229	...	155,928
1933	4,559	1,778,648	...	283,845
1934	5,285	2,194,538	...	208,511
1935	8,110	3,181,278	...	230,890
1936	5,142	3,815,643	...	198,460
Total ...	6,133,863	121,088,261	6,442,397	25,441,146

\* Includes 2,758 tons of spelter.

The total value of production, as stated above, amounted to £1,592,154 in 1931 when, owing to low prices, mining operations were restricted. There was an expansion of production in the following years and under the influence of higher prices the total value increased from £1,722,840 in 1932 to £2,408,334 in 1934, to £3,420,278 in 1935, and to £4,019,245 in 1936.

As stated previously, the bulk of the ores produced in the silver-lead mines is exported for treatment to other parts of Australia or despatched in the form of concentrates to overseas countries; therefore the figures shown in the preceding table do not indicate fully the value of the New South Wales production of the various metals. The Department of Mines has collected records from the various mining and smelting companies and ore-buyers with the object of ascertaining the actual value accruing to the Commonwealth from the silver-lead mines of this State. Thus particulars have been obtained regarding the quantity and value of the silver, lead, and zinc extracted within the Commonwealth, and the gross metallic contents of concentrates exported overseas have been estimated on the basis of average assays as follows. In the case of the lead and zinc contents, the quantities have been estimated only when payment was made for them.

Year.	Metal obtained within Commonwealth from ores raised in New South Wales.				Concentrates exported oversea.						Total Value of Production from Silver-lead Ores of New South Wales.
	Silver.	Lead.	Zinc.	Aggregate Value.	Quantity.	Contents by average assay.			Assessed Value.		
						Silver.	Lead.	Zinc.			
1921	oz. fine. 3,624,413	tons. 47,426	tons. 1,425	£ 1,723,864	tons. 47,127	oz. fine. 617,477	tons. 6,539	tons. 19,272	£ 261,238	£ 1,985,102	
1926	7,338,477	142,654	39,277	6,730,689	251,294	2,371,264	23,242	96,167	1,591,673	8,322,362	
1929	7,619,884	165,364	46,163	5,918,014	156,532	835,607	7,069	76,619	734,261	6,652,275	
1930	7,876,894	162,703	53,958	4,579,412	187,228	844,188	14,044	87,913	911,724	5,491,136	
1931	6,177,863	129,819	53,832	2,995,029	95,421	460,958	13,405	43,629	257,705	3,252,734	
1932	5,896,193	131,422	53,260	3,001,005	57,591	178,034	1,222	30,164	124,719	3,125,724	
1933	7,430,479	158,475	53,956	3,579,836	140,203	790,792	18,344	63,849	475,161	4,055,047	
1934	7,880,624	153,641	54,629	3,384,193	89,054	826,596	22,142	34,016	345,350	3,729,543	
1935	8,422,316	180,958	67,666	4,933,492	147,856	669,630	11,917	72,285	424,929	5,258,421	
1936	7,778,514	157,755	57,744	4,608,838	147,969	779,289	18,569	68,011	549,319	5,158,207	

The silver-lead ores mined in New South Wales contain, in addition to silver, lead, and zinc, a number of other metals, *e.g.*, cadmium, copper, gold, and antimony, but unless these metals are extracted within New South Wales they are not represented in statistics of the mineral production of the State, except by inclusion as zinc concentrates.

Cadmium is recovered at Risdon, Tasmania, as a by-product in the treatment of zinc ores mined at Broken Hill. The quantity extracted during 1935 was 219 tons, valued at £48,980, and during 1936 the value of 214 tons was £59,978.

#### COPPER.

The ores of copper are distributed widely throughout New South Wales. Deposits of commercial value have been mined in the central portion of the State, but the industry has been handicapped severely in many places by the high cost of transport to market, and, as the price fluctuates considerably, operations have been intermittent. Large quantities of low-grade ores are available, and when the market is favourable they may be treated profitably.

The quantity and value of the copper won in New South Wales, as estimated by the Department of Mines, are shown below:—

Period.	Ingots, Matte, and Regulus.		Ore.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	tons.	£	tons.	£	£
1858-1900	95,501	5,474,309	6,101	92,651	5,566,960
1901-1905	33,989	2,011,609	8,578	104,533	2,116,142
1906-1910	41,898	2,869,101	6,872	62,006	2,931,107
1911-1915	36,305	2,169,508	9,870	108,226	2,277,734
1916-1920	21,453	2,355,248	554	8,887	2,364,135
1921-1925	3,863	259,926	129	1,822	261,748
1926-1930	867	58,053	339	3,102	61,155
1931	485	23,298	56	650	23,948
1932	632	21,785	...	...	21,785
1933	706	26,775	...	...	26,775
1934	681	23,530	96*	1,868	25,398
1935	800	28,563	56	1,508	30,071
1936	758	45,455	615†	8,272	53,687
Total ...	237,938	15,367,120	33,266	393,525	15,760,645

\* Includes 39 tons of ore exported overseas during 1933.

† Concentrates.

The output of copper in 1935 was obtained for the most part in the treatment of other ores mined at Broken Hill. Owing to low prices ruling for the metal no copper mines operated during 1933, and only small outputs were obtained from copper mines in subsequent years.

### TIN.

Tin, unlike copper, is restricted in its geographical and petrological range, and is the rarest of the common metals of commerce. The lodes discovered in New South Wales are numerous, but they are on a small scale. The maximum depth attained is about 360 feet.

Tin ore occurs in the northern, southern, and western divisions. The areas in which workable quantities have been located are on the western fall of the New England Tableland, with Emmaville and Tingha as the chief centres, and at Ardlethan in the southern district. Alluvial deposits of stream tin in the northern rivers are exploited by means of dredging.

Tin has contributed in a very considerable degree to the total production of the mineral wealth of the State, although its aggregate yield, in point of value, is below that of coal, silver, gold, and zinc, and it was not until 1936 that its aggregate value exceeded that of copper.

Particulars of the output and the value of production of tin are shown below:—

Period.	Ingots.		Ore.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	tons.	£	tons.	£	£
1872-1900	67,055	5,879,803	13,581	908,130	6,787,933
1901-1905	4,319	557,855	1,994	142,977	700,832
1906-1910	5,244	816,061	3,947	377,620	1,193,681
1911-1915	4,268	793,550	7,262	806,815	1,600,365
1916-1920	4,346	1,053,645	6,953	1,005,841	2,059,486
1921-1925	3,628	805,294	2,005	204,073	1,009,367
1926-1930	4,654	1,120,122	54	1,733	1,121,855
1931	777	101,761	17	1,350	103,111
1932	793	120,124	...	...	120,124
1933	1,135	218,244	...	...	218,244
1934	1,161	325,187	18	2,943	328,130
1935	1,075	284,764	21	3,126	287,890
1936	1,076	262,661	38	5,793	268,454
Total ..	99,531	12,339,071	40,890	3,460,401	15,799,472

Owing to a persistent decline in the price of tin the output decreased in 1929 and 1930, but the production has since been restored, as a result of greater activity amongst prospectors and fossickers, and a substantial increase in price which occurred in June, 1933. The value of tin production in 1934 was the highest since 1920, but because of a recession in prices, larger outputs in 1935 and 1936 returned lower values.

There are a number of dredges for the recovery of tin in the northern districts. The quantity of tin so obtained was 502 tons in 1935 and 421 tons in 1936 valued at £87,790 and £67,533 respectively, as compared with 464 tons, valued at £87,005 in 1934. The total yield by dredging since 1901 has been 30,825 tons, valued at £4,021,565.

#### IRON AND IRON ORES.

Iron ore of good quality occurs in many parts of New South Wales. The most extensive deposits are at Cadia, where 10,000,000 tons may be recovered economically; at Carcoar, where a large quantity has been produced; and at Goulburn and Queanbeyan, each containing about 1,000,000 tons; at Wingello there are about 3,000,000 tons of aluminous iron ores of low grade. It has been estimated that in the known deposits, excluding Wingello ores, there are 15,000,000 tons which may be recovered by quarrying, and that a much greater quantity may be obtained by more costly methods of mining.

Prior to 1907 iron ore was mined principally for use as flux in smelting other ores, although in 1884, at Mittagong, and in later years at Lithgow, the production of pig-iron from local ores had been attempted without permanent success. Following a reorganisation and remodelling of the Eskbank Ironworks, Lithgow, iron ore was produced on a more extensive scale, mainly from the Cadia and Carcoar deposits. In 1928 new iron and steelworks were opened at Port Kembla, and the Lithgow works have been transferred to the new site. The iron ore used at the Port Kembla and Newcastle iron and steel works is imported from South Australia, and with the cessation of operations at Lithgow the production of local iron ore was suspended.

Until 1907 the output of pig iron was principally from scrap iron, but in the years 1907 to 1910 pig iron produced from local ores amounted to 116,273 tons. In the years 1911-1920 the production was 599,752 tons, and in the next quinquennium 408,864 tons were produced. The output in 1926 and 1927 was 105,201 tons and 118,951 tons respectively, but it declined to 56,776 tons in 1928 as the treatment of local ores diminished with the progress of the new works at Port Kembla. In 1929 production amounted to only 3,911 tons and there was no production during the following years with the exception of 1935, when 4,580 tons were obtained. The bulk of the ore treated in New South Wales is imported, mainly from South Australia. The total production of pig iron from local ores during the years 1907 to 1936 was 1,414,308 tons, valued at £7,511,755. Ironstone flux amounting to 2,432 tons, and valued at £950, was obtained during 1933, but there was no further production.

Further details relating to the operations of ironworks are shown in the chapter relating to factories.

#### *Iron Oxide.*

Iron oxide is obtained in the Port Macquarie, Moss Vale, Newcastle, Milton, and Goulburn districts for use in purifying gas or as a pigment. The output during 1935 and 1936 was 4,512 tons and 3,440 tons, valued at £2,546 and £2,091 respectively, mined almost entirely in the Port Macquarie district. The total output to the end of 1936 was 102,428 tons, valued at £95,555.

## OTHER METALS.

*Platinum.*—Platinum occurs in several districts of New South Wales, but platinum mining is comparatively unimportant. The quantity produced to the end of 1936 amounted to 20,140 oz. valued at £128,037, of which 98 oz. valued at £649, were obtained during 1935, and 47 oz., valued at £419 during 1936.

*Chromite.*—Chromite, or chromic iron ore, is the only commercially important ore of chromium. It is found usually in association with serpentine. The chromite mined in New South Wales is used as a refractory material. The principal deposits are in the Gundagai and Tumut districts, and there are smaller quantities in the northern portion of the State. The quantity produced during 1935 was 595 tons, and during 1936, 415 tons, valued at £1,487 and £1,038 respectively, making a total output of 42,803 tons, valued at £132,254.

*Tungsten ores.*—The tungsten ores, wolfram and scheelite, occur in many localities in New South Wales generally in association with tinstone (cassiterite) bismuth, and molybdenite. These ores are used mainly in the manufacture of special steels for which the demand increased during the war period and declined upon the cessation of hostilities. Owing to the low price offered for the products, there was no production of scheelite between 1927 and 1928 and no wolfram was won between 1925 and 1928. In 1929 a small demand set in for both ores, and in the three years 1929 to 1931 16 tons of scheelite valued at £1,131 and 78 tons of wolfram valued at £4,672 were produced. No scheelite was produced in 1932 and 1933, but there was in these years an output of 24½ tons of wolfram valued at £1,028. The output of scheelite in 1934 was 6½ tons, in 1935 it was 2½ tons, and it increased to 12½ tons in 1936, the value in each year being £818, £381 and £1,631 respectively, while wolfram to the extent of 47½ tons in 1934, 56½ tons in 1935 and 5½ tons in 1936 was valued at £6,506, £5,694 and £560 respectively. The total production up to the end of 1936 was 1,728 tons of scheelite, valued at £196,336 and 2,488 tons of wolfram valued at £286,455.

*Molybdenum.*—Supplies of molybdenite, the principal ore of molybdenum, exist in New South Wales. Its main use, however, is for the manufacture of molybdenum steel, and, as in the case of tungsten ores, the demand has become almost negligible. The output to the end of 1936 was 846 tons, valued at £215,228, of which 3½ tons, valued at £563, were produced in 1934, and 5 cwt. valued at £21 in 1936. There was no production in 1935.

*Antimony.*—This mineral may be obtained in a number of districts, in the north-east of the State. Owing to fluctuations in the price of the metal, mining is spasmodic. The total output of antimony to the end of the year 1936 was 19,708 tons, valued at £369,963, of which 49 tons, valued at £780, were produced in 1935, and 92 tons, valued at £1,772, in 1936.

*Manganese.*—Manganese ores have been discovered in various places but generally in localities which lack facilities for transport. No production was recorded in 1931, but 106 tons won in 1932, 129 tons in 1933, 103 tons in 1934, 148 tons in 1935, and 72 tons in 1936, were valued at £340, £448, £309, £444, and £243, respectively.

*Bismuth.*—Bismuth has been obtained chiefly in the neighbourhood of Glen Innes, and at Whipstick in the South Coast division. In other districts bismuth is associated with molybdenite and wolfram ores. The quantity of bismuth produced in 1935 was 4½ tons and in 1936 1 cwt., valued at £285 and £17 respectively. The quantity produced to the end of 1936 was 891 tons of ore, valued at £244,769.

*Mercury*.—Cinnabar, the most important ore of mercury, occurs in numerous localities, but it has not been discovered in a sufficiently concentrated form to enable it to be mined profitably. No production of quicksilver has been recorded since 1916.

#### COAL.

The main coal basin extends along the coast from Port Stephens on the north to Ulladulla on the south, and this seaboard of nearly 200 miles enhances the value of the deposits by facilitating shipment and the development of oversea trade. From Ulladulla the basin trends inland to the west and north-west as far as Rylstone, whence the boundary line extends northward beyond Gunnedah, and then runs in a south-easterly direction to Port Stephens. The widest part of the area is between Dubbo and Newcastle, 150 miles, and the basin is deepest in the neighbourhood of Sydney, where the uppermost seam is nearly 3,000 feet below the surface.

From Sydney the measures rise gradually in all directions. They emerge to the surface at Newcastle on the north, at Bulli in the Illawarra district to the south, and at Lithgow, in the Blue Mountains region, to the west, and these three districts contain the important coal mining centres.

The Upper or Newcastle coal measures show the greatest surface development. In the northern field they are known to contain twelve seams, six being worked; in the southern, seven distinct seams are known, and three have been worked; of the seven seams traced in the western field, only three are of commercial value. After many unsuccessful boring operations, the uppermost seam of the Newcastle measures was located under Sydney Harbour in 1891, and it has been worked to a depth of nearly 3,000 feet.

The coal obtained at Cessnock-Maitland is especially suitable for gas-making. The coal from Newcastle, Bulli and Lithgow is essentially steam coal. Bulli coal produces a strong coke, specially suitable for smelting purposes by reason of its capacity for sustaining the weight of the ore burden in a blast furnace, and it contains less ash than the western. The coal obtained at the Sydney Harbour Colliery was loaded into oversea steamers from a wharf near the pit's mouth, but this mine has not been worked since 1930.

An isolated basin of upper coal measures has been discovered at Coorabbin in the Riverina district, 400 miles from Sydney, but it is worked on a small scale intermittently.

In the western and southern fields the upper coal measures contain deposits of shale suitable for the manufacture of kerosene oil and for the production of gas. Deposits of kerosene shale, though much less extensive, occur in the upper and Greta measures of the northern coal-field.

The middle coal measures outcrop near East Maitland, but do not appear in the western field. Their occurrence in the southern field has not been proved definitely.

The lower or Greta measures outcrop over an irregular area in the neighbourhood of Maitland, and have been traced with intervening breaks as far north as Wingen. They occur as an isolated belt to the north of Inverell, and extend through Ashford, almost to the Queensland border. These measures have been located in the Clyde Valley, in the extreme southern portion of the Illawarra field, but do not occur in the western. The coal of the Greta measures is contained in two seams, and is the purest and generally the most useful obtained in the State, being of a good quality, hard, and economical as regards working. The Greta seams are worked extensively between West Maitland and Cessnock, in the most important coal-mining district in Australia, and at Muswellbrook.

Developments in the commercial production of power oil from coal in Great Britain by the hydrogenation process has focussed the attention of coal producers upon the possibilities of the rehabilitation of the industry by the utilization of coal produced in this State for the production of motor spirit, oils, etc.

Investigations by State and Commonwealth Governments of hydrogenation and low temperature carbonisation processes have been made, but commercial production appears unlikely at present.

Tests of bulk samples of coal made abroad in 1934 demonstrated that coal from the Greta seam is superior to the best British coal for carbonisation at low temperatures and that it yields considerably more tar and coke of higher quality.

### *State Coal Mine.*

A State coal mine was opened at Lithgow, in the Western district, in September, 1916. The area of the land containing coal reserved for the Crown amounts to about 40,200 acres, and the available supply of coal has been estimated at 240,000,000 tons. The mine, which was closed in July, 1917, was taken over by the Railway Commissioners in the early part of 1921, and transferred to the jurisdiction of the Minister for Mines on 1st October, 1932. Under the State Coal Mines (Amendment) Act, 1932, control of the mine is vested in the State Coal Mines Control Board, consisting of the Under-Secretary, Department of Mines (Chairman), an officer of the Mines Department, nominated by the Minister for Mines, and a representative of the Department of Railways, nominated by the Minister for Transport.

The output from the mine was 552,320 tons in 1930-31, 374,251 tons in 1933-34, 353,207 tons in 1934-35, and 355,894 tons in 1935-36.

### *Production of Coal.*

The following table shows the quantity and value of coal raised in New South Wales to the close of 1936, the total production being 403,427,114 tons, valued at £217,428,621.

Period.	Coal Raised.	Value at Pit's Mouth.	Average value per ton.
	tons.	£	s. d.
To 1900	91,476,633	37,315,915	8 1
1901-05	30,917,230	10,703,600	6 11
1906-10	40,624,698	14,240,992	7 0
1911-15	48,831,214	17,759,946	7 3
1916-20	44,830,757	25,847,168	11 6
1921-25	54,469,448	45,086,283	16 7
1926-30	46,170,868	38,628,003	16 9
1931	6,432,382	4,607,343	14 4
1932	6,784,222	4,376,453	12 11
1933	7,118,437	4,306,799	12 1
1934	7,873,180	4,541,923	11 6
1935	8,698,579	4,887,341	11 3
1936	9,199,466	5,126,850	11 2
Total ...	403,427,114	217,428,621	10 9

The production of coal exceeded 10,000,000 tons in each year from 1920 to 1927, reaching the maximum in 1924 when the production was 11,618,216 tons. In 1928 there was a marked decline in the demand for coal, and in 1929 and 1930 operations were affected also by a prolonged cessation of

work in the northern mines. The general industrial depression was a major factor in the restricted production of the following years and the output in 1931 was the lowest since 1904. As a result of widespread recovery in industrial activity, production in 1936 was higher than in 1931 by 2,767,084 tons.

The bulk of the coal is obtained from the northern coal-fields. The output of each district during 1935 and 1936 respectively was:—Northern, 5,679,802 and 6,197,554 tons, valued at £3,336,137 and £3,570,661; Southern, 1,558,282 and 1,626,143 tons, £919,274 and £952,231; Western, 1,460,495 and 1,375,769 tons, £631,930 and £603,958. The output of coal in 1936 increased by 500,887 tons, after offsetting against increases of 517,752 tons in the Northern District and 67,861 tons in the Southern District a decrease of 84,726 tons in the Western District. Of the total output in 1936, 5,021,146 tons or 54.58 per cent. were drawn from tunnels, and 4,178,320 tons or 45.42 per cent. from shafts. Of the coal wrought, 22.6 per cent. was cut by machinery in 1935 and 26.8 per cent. in 1936.

A comparative statement of prices of coal during the years 1916 to 1930 is shown on page 487 and some idea of the subsequent fall in prices may be gleaned from the average values at the pit as shown in the preceding table.

#### *Disposal of Coal.*

The following statement shows the quantity of coal retained for local consumption, and the interstate and oversea exports in 1921 and later years. The bunker coal loaded in Sydney Harbour into interstate steamers in 1921, 1926 and 1928 is included in the table under the heading "domestic consumption," because it was not distinguished in the records from the coal taken in that port by intrastate vessels. In this group are included also coal used in the coal mines, miners' coal, dirt, etc., which amounted to 351,000 tons in 1936.

Year.	Retained for Domestic Consumption	Sent to other Australian States.	Total quantity consumed in Australia.	Exported to Oversea Countries.	Total Production.
	tons.	tons.	tons.	tons.	tons.
1921	5,268,628	2,752,810	8,021,438	2,771,949	10,793,387
1926	6,347,939	2,740,570	9,088,509	1,797,257	10,885,766
1928	6,102,644	2,209,981	8,312,625	1,135,572	9,448,197
1929	5,436,114	1,486,902	6,923,016	694,720	7,617,736
1930	4,994,552	1,451,594	6,446,146	646,909	7,093,055
1931	4,090,554	1,540,416	5,630,970	801,412	6,432,382
1932	4,489,874	1,501,598	5,991,472	792,750	6,784,222
1933	4,663,259	1,623,840	6,287,099	831,338	7,118,437
1934	5,183,153	1,882,873	7,066,026	807,154	7,873,180
1935	5,932,714	1,889,274	7,821,988	876,591	8,698,579
1936	6,122,049	2,166,241	8,288,290	911,176	9,199,466

#### *Per cent. of Total.*

1921	48.8	25.5	74.3	25.7	100
1926	58.3	25.2	83.5	16.5	100
1928	64.6	23.4	88.0	12.0	100
1929	71.4	19.5	90.9	9.1	100
1930	70.4	20.5	90.9	9.1	100
1931	63.6	23.6	87.5	12.5	100
1932	66.2	22.1	88.3	11.7	100
1933	65.5	22.8	88.3	11.7	100
1934	65.8	23.9	89.7	10.3	100
1935	68.2	21.7	89.9	10.1	100
1936	66.6	23.5	90.1	9.9	100

The greatest decline, absolutely and relatively, occurred in the oversea exports, which represented 9 per cent. of the output in 1930 as compared with 25 per cent. in 1921 and 16 per cent. in 1926. There was a diminution in interstate exports also—relatively greater than the foregoing figures indicate, as those for the earlier years do not include Sydney bunker trade. In 1931 there was a slight increase in exports, but a marked decline in the quantity retained for local consumption. Since 1931 production has increased materially, chiefly because of greater home consumption, which between 1931 and 1936 increased by 2,031,495 tons as compared with increases of 625,825 tons in coal sent to other States and 109,764 tons in exports oversea. Of the increase in 1936, however, 276,967 tons, or 55 per cent., occurred in interstate exports as against 189,335 tons, or 38 per cent., in domestic consumption. Some of the coal sent to South Australia is re-exported to Broken Hill.

Full particulars are not available as to the purposes for which coal is used locally, but statistics of factories and railways with those of the export trade contain information which covers a large proportion of the total production. The following statement shows these details for 1928-29 and the last six years, though they differ from those shown in other tables in so far as they refer to periods of twelve months ending June, and not to calendar years:—

Coal Used.	1928-29.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
<b>In Factories—</b>							
Fuel In Electricity Works	tons. 882,355	tons. 741,180	tons. 783,970	tons. 815,291	tons. 891,049	tons. 1,005,424	tons. 1,005,424
Other Factories ...	1,318,880	656,383	715,054	874,036	1,000,558	1,092,790	
	2,201,235	1,397,463	1,499,024	1,689,327	1,891,607	2,098,214	†
Raw Material in Gas Works	661,878	515,508	502,252	508,926	517,347	534,140	
„  Coke Works	869,257	398,800	655,957	903,136	1,241,279	1,284,603	
	1,531,135	914,308	1,158,209	1,412,062	1,758,626	1,818,743	
Total In Factories ...	3,732,370	2,311,771	2,657,233	3,101,389	3,650,233	3,916,957	
<b>On Railways for Locomotive Purposes ...</b>	1,212,272	896,147	907,291	865,837	906,511	972,890	985,580
<b>Total, Factories and Railways</b>	4,944,642	3,207,918	3,564,524	3,967,226	4,556,744	4,889,847	†
<b>Exports—</b>							
Interstate*—Cargo ...	1,541,788	1,250,940	1,414,055	1,465,588	1,631,062	1,643,397	1,900,028
„  Bunker ...	488,200	262,604	304,351	333,441	394,967	354,380	404,996
Total, Interstate ...	2,029,988	1,513,544	1,718,406	1,799,029	2,026,029	1,997,777	2,305,024
Overseas—Cargo ...	311,608	342,419	282,969	291,835	304,087	306,356	340,083
„  Bunker ...	645,266	456,202	531,300	562,965	539,750	582,866	572,026
Total, Overseas ...	956,874	798,621	814,269	854,800	843,837	889,222	912,109
<b>Total Exports ...</b>	2,986,862	2,312,165	2,532,675	2,653,829	2,869,866	2,886,999	3,217,133
<b>Total, Factories, Railways and Exports ...</b>	7,931,504	5,520,083	6,097,199	6,621,055	7,426,610	7,776,846	†

\* Approximate.

† Not yet available.

The quantity of coal used as fuel in factories rose and fell with the general movement in the secondary industries, the requirements of the electric light and power works being an important factor. The demand for coal as raw material in gas works declined between 1928-29 and 1932-33 and has since risen slightly, but the quantity used in coke works, which has fluctuated somewhat, increased rapidly after 1932-33, chiefly as a result of expansion in the iron and steel industry. The quantity consumed by railway locomotives has declined on account of the electrification

of some of the railway services, economy in the use of coal for steam engines, and, temporarily, through a reduction in traffic. The export trade has been affected by reason of a diminution in the demand due to such causes as the substitution of oil.

On the average it appears that local factories absorb nearly 44 per cent. of the output, the railways approximately 11 per cent., and the export trade slightly less than 33 per cent.

In May, 1929, the Governments of the Commonwealth and of the State of New South Wales, acting in conjunction, appointed a Royal Commission to investigate the position of the coal industry and the causes which had led to a marked decline in the local demand as well as in the export trade. The report of the Commission issued in March, 1930, contains a comprehensive review of the industry. The Commission recommended that coal-mining be placed under the control of a commission with far-reaching powers to regulate all phases of the industry, including conditions of employment; also that advisory committees of experts be appointed to assist the board. Further particulars relating to the recommendations and details regarding the working of the mines are shown in the 1929-30 issue of the Year Book.

#### *Colliery Days Worked.*

The intermittency of operations in the coal-mining industry, due chiefly to irregularity of orders, the frequency and magnitude of industrial disputes and over-development, is indicated by the following table showing the weighted average number of days worked in the main coal-mining districts since 1913:—

Year.	Northern.	Southern.	Western.	Total.
	days.	days.	days.	days.
1913 ... ..	234	227	261	233
1917 ... ..	201	207	221	204
1921 ... ..	221	234	217	223
1925 ... ..	197	194	257	202
1927 ... ..	175	203	229	187
1928 ... ..	159	175	209	168
1929 ... ..	79	228	244	132
1930 ... ..	92	149	195	119
1931 ... ..	134	129	194	141
1932 ... ..	150	158	194	157
1933 ... ..	172	175	192	175
1934 ... ..	177	198	202	184
1935 ... ..	198	216	222	205
1936 ... ..	196	201	207	198

The maximum number of days which it is possible to work is 274, but the average has rarely approached this total.

Between 1921 and 1927 the number of persons engaged in coal-mining increased steadily from 20,973 to 24,483. At the same time there was a definite downward trend in the average number of days worked on the northern and southern fields and for New South Wales as a whole.

The effects of the prolonged stoppage of the principal northern collieries from March, 1929, to June, 1930, are discernible in the decreased average number of days worked on the northern field in those years, and in the increased number of days worked in the southern and western districts, due to diversion of trade.

The comparatively high and steady average in the western mines is accounted for by the fact that in the large State colliery and in collieries supplying the cement-making industry work has been much more regular than in the other collieries producing for the open market.

*Output of Coal per Man Day.*

The approximate average output per man-day worked is shown below for various years since 1913:—

Year.	Below Ground.				All Employees.			
	Northern.	Southern.	Western.	Total.	Northern.	Southern.	Western.	Total.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1913 ...	3·25	2·75	4·01	3·18	2·44	2·12	3·29	2·41
1917 ...	3·36	2·88	4·29	3·33	2·46	2·20	3·56	2·50
1921 ...	3·17	2·69	4·62	3·17	2·34	2·00	3·74	2·36
1925 ...	3·25	2·86	3·55	3·21	2·42	2·12	2·76	2·41
1927 ...	3·34	2·78	3·77	3·27	2·50	2·14	2·94	2·48
1928 ...	3·58	2·87	4·38	3·53	2·61	2·21	3·34	2·62
1929 ...	3·67	2·60	4·07	3·45	2·66	2·08	3·16	2·58
1930 ...	4·09	2·90	4·19	3·80	2·96	2·23	3·27	2·81
1931 ...	4·20	3·28	4·23	4·04	3·01	2·48	3·33	2·96
1932 ...	4·27	3·26	4·72	4·15	3·06	2·81	3·16	3·03
1933 ...	4·42	3·44	5·28	4·34	3·15	2·58	4·22	3·17
1934 ...	4·65	3·14	5·29	4·40	3·35	2·44	4·28	3·26
1935 ...	4·64	3·41	5·08	4·42	3·40	2·62	4·17	3·33
1936 ...	4·86	3·39	5·11	4·55	3·58	2·64	4·18	3·44

In considering fluctuations in the annual average output per man day, due allowance must be made for the frequent changes occurring through the closure of old mines and the opening of new mines with varying efficiency, and for the increasing age of workings. Since 1930 depressed trade and substantially reduced prices have tended to divert production to the more economical workings.

OIL SHALE.

Oil-bearing mineral, which is a variety of torbanite or cannel coal, known locally as kerosene shale, has been found in many localities in New South Wales, the most important deposits being in the Capertee and Wolgan Valleys.

The production of oil shale from the opening of the mines in 1865 to the end of 1936 amounted to 1,925,053 tons, valued at £2,695,121, of which all but 7,217 tons, valued at £8,204, had been produced by the end of 1922. From 1900 until 1922 annual production ranged between 15,474 tons in 1915 and 86,018 tons in 1912, but the maximum production since 1922 amounted to only 2,691 tons in 1932. There was no production in the years 1925 to 1929, inclusive, nor in 1933, 1935, and 1936, but in 1934 a quantity of 200 tons was obtained for experimental purposes.

The resumption of shale mining in 1931 and 1932 was an outcome of a grant of £100,000 made available by the Commonwealth Government for the employment of surplus coal miners. The Shale Oil Development Committee was formed to administer the grant, and arrangements were made to subsidise holders of shale oil leases to enable them to provide work, but as this policy resulted in the employment of only a few of the miners, the Committee was incorporated as a limited company and commenced mining operations at Newnes, in the Wolgan Valley, in August, 1931. About two months later a quantity of shale was despatched abroad, and the retorts at Newnes were brought into operation for the extraction of oil at the mine.

Over the whole period of the Committee's mining operations—1st November, 1931 to 16th April, 1932—3,980 tons of oil shale were mined and 176 tons of lower grade shale from adjoining leases were purchased; 3,885 tons of oil shale were treated in the retorts for a yield of 381,196 gallons, or an average of approximately 98 gallons of crude oil per ton of shale. In the same period the quantity of coal mined was 2,795 tons.

On 28th June, 1932, the oil works at this locality were transferred to a private organisation, which abandoned the project in November, 1932. A committee, known as the Newnes Investigation Committee, comprising an independent chairman and six members (three nominated by the Commonwealth and three by the State Government) was set up, to investigate the possibilities of the industry. In 1934 the Committee reported that reserves of shale of workable thickness were 2,000,000 tons, with a probable reserve of a further 3,000,000 to 4,000,000 tons, and that the cost of establishing the industry on a sound basis was estimated at £600,000.

Following further investigation, the Commonwealth Government in 1937 arranged for the sale to a private company of an option to purchase which it held over equipment on the Newnes-Capertee shale oil field and undertook to afford assistance to enable the company to commence operations. Of the capital required to launch the new venture, £166,000 is to be provided by the company, £334,000 by the Commonwealth Government and £166,000 by the New South Wales Government. The amounts provided by the Governments are to take the form of loans bearing a low rate of interest. Among other concessions, protection over imported petrol to the extent of existing customs and excise duties is to be granted by the Commonwealth Government for a period of 20 years on a maximum annual output of 10,000,000 gallons of petrol. In the event of a reduction of the customs duty of 7d. per gallon on imported petrol and the excise duty of 5½d. per gallon on petrol produced from imported crude oil, the full measure of protection is to be maintained by the payment of a bounty.

#### DIAMONDS.

Diamonds and other gem-stones occur in various places in New South Wales, but an extensive field has not been discovered. The finest of the New South Wales diamonds are harder and whiter than the South African, and are equal to the best Brazilian gems.

The following table shows the output of diamonds as recorded, but it is probable that the actual output was much greater. The majority of the diamonds have been obtained from the mines in the Bingara and Copeton districts:—

Period.	Carats.	Value.	Period.	Carats.	Value.
		£			£
1867-1900	100,103	55,535	1931	725	694
1901-1905	54,206	4 6,434	1932	251	252
1906-1910	16,651	12,374	1933	123	123
1911-1915	16,003	13,353	1934	49	52
1916-1920	11,973	12,573	1935	...	...
1921-1925	3,232	4,183	1936	650	650
1926-1930	1,077	1,226			
			Total ...	205,043	147,449

#### OPAL.

Precious opal occurs in two geological formations in New South Wales, viz., in tertiary vesicular basalt and in the upper cretaceous sediments. The most important deposits are in the upper cretaceous rocks at White Cliffs

and Lightning Ridge. Gems from the latter field are remarkable for colour, fire, and brilliancy. The opals from vesicles in the tertiary basalt at Tintenbar in the North Coast division resemble the Mexican gems.

The following table shows the estimated value of precious opal won in New South Wales to the end of 1936:—

Period.	Value.	Period.	Value.
	£		£
1890-1900	456,599	1932	1,233
1901-1905	476,000	1933	4,231
1906-1910	305,300	1934	3,283
1911-1915	154,738	1935	5 070
1916-1920	105,547	1936	6,110
1921-1925	51,740		
1926-1930	47,409	Total ...	1,619,438
1931	2,178		

The output of opal was greatest during the five years ended 1903, when the average value was £115,000 per annum.

#### ALUNITE.

Alunite, or alumstone, occurs at Bullahdelah, about 35 miles from Port Stephens, in a narrow mountain range which for more than a mile is composed mainly of alunite, of greater or less purity. Owing to the nature of the occurrences, it has not been possible to estimate the ore reserves of commercial value. Four varieties of alunite are recognised at the mines, but operations were confined mainly to the light-pink ore, the average yield being about 80 per cent. of alum.

In 1926 the output of alunite was 580 tons valued at £2,320 and there was no further production until 1935 when 570 tons taken from dumps realised £1,069. The production in 1936 was 738 tons valued at £1,384 and the total production since 1890 valued at £211,248 was 59,497 tons.

#### OTHER MINERALS.

*Marble.*—Beds of marble of great variety of colouring and with highly ornamental markings, are located in many districts of New South Wales. Much of the marble is eminently suitable for decorative work.

*Limestone.*—Immense supplies of limestone are distributed widely throughout the State. The commercial value of the deposits depends mainly on their accessibility and proximity to market. The bulk of the limestone is raised for the manufacture of cement in localities where coal and shale are readily available.

*Fireclays.*—Fireclays of good quality are found in the permo-carboniferous coal measures, and excellent clays for brick-making, pottery, etc., may be obtained in the State, chiefly in Sydney and Wollongong districts.

*Magnesite.*—Magnesite is distributed widely, but few deposits are of commercial value. Large quantities have been mined at Fifield, Attunga, and Barraba. The output during 1935 was 15,688 tons, valued at £27,454, and 17,183 tons, valued at £30,070, were mined in 1936.

*Diatomaceous earth* occurs in several localities. The principal deposits are situated at Cooma, Barraba, Coonabarabran, and Wyrallah. The output in 1936 was 2,303 tons, valued at £4,606.

*Other Mineral Deposits.*—Other mineral deposits known to exist but not worked extensively include asbestos, barytes, fluorspar, Fuller's earth, ochre, graphite, gypsum, slate, and mica. Quartzite for the manufacture of silica bricks is obtainable in large quantities.

## QUARRIES.

The Hawkesbury formation in the Metropolitan district provides excellent sandstone for architectural use. The supply is very extensive, and the stone is finely grained, durable, and easily worked. In the north-western portion of the State and in the northern coal districts good building stone is obtainable.

Syenite, commonly called trachyte, is found at Bowral. For building purposes it is solid, and takes a beautiful polish.

Granite occurs at many places in the State, and it has been quarried generally in places near the coast, whence transport is cheaper than from less accessible localities. The pylons of the Sydney Harbour Bridge are faced with granite quarried at Moruya.

Basalt or blue metal, suitable for ballasting roads and railway lines and for making concrete, is obtained at Kiama and other localities.

The following statement shows the output of the quarries and clay, gravel and sand pits during the years 1935 and 1936, as recorded in returns collected from the owners under the Census Act of 1901:—

Stone, etc.	1935.		1936.	
	Quantity.	Value.	Quantity.	Value.
	tons.	£	tons.	£
Building and Construction				
Stone—				
Sandstone ... ..	44,089	31,927	20,645	31,261
Granite ... ..	14,995	9,086	473	1,109
Basalt ... ..	222,185	56,503	455,881	95,838
Dolerite ... ..	94,979	19,914	100,384	22,527
Trachyte, etc. ... ..	1,315	3,101	592	1,281
Limestone ... ..	7,589	4,238	5,108	3,159
Marble ... ..	470	1,912	405	2,783
Diorite ... ..	...	...	3,700	690
Macadam, Ballast, etc.—				
Sandstone ... ..	318,949	55,599	382,067	67,382
Granite ... ..	22,880	3,401	95,159	36,928
Bluestone, Basalt, etc. ...	1,165,688	232,456	818,432	164,698
Quartzite ... ..	2,388	1,755	...	...
Dolerite ... ..	...	...	1,400	460
Trachyte ... ..	3,703	1,186	7,102	2,030
Limestone ... ..	16,008	3,066	15,963	3,130
Gravel ... ..	1,695,931	299,433	2,594,819	465,760
Sand ... ..	281,668	28,415	283,320	27,802
Shale ... ..	60,009	10,464	82,728	14,844
Andesite ... ..	102,325	10,693	89,763	6,464
Porphyrite ... ..	42,870	2,858	46,473	3,098
Other... ..	8,821	1,393	136,872	14,264
Limestone—				
For Cement ... ..	349,738	55,194	378,682	63,512
For Burning ... ..	59,449	16,892	59,686	15,277
For Flux ... ..	105,384	19,954	118,927	20,355
Shale for Cement... ..	63,074	9,699	59,190	7,536
Clays—				
Brick ... ..	1,313,632	133,302	1,323,004	141,092
Pottery ... ..	19,700	4,144	19,212	4,614
Earthenware ... ..	50,461	7,094	83,972	9,752
Kaolin ... ..	10,731	7,430	8,964	6,996
Fire Clay ... ..	38,922	8,519	40,874	10,130
Silica ... ..	15,694	9,541	21,411	13,059
Other... ..	5,449	803	1,590	159
Shell Grit ... ..	3,023	3,017	3,073	3,311
Total ... ..	6,142,119	1,052,989	7,259,871	1,261,301

Of the value of output shown above, the portion won from quarries using power machinery or employing four hands or more was £1,215,730 in 1936.

The output of the quarries was large in the years 1926 to 1929 when there was great activity in building, road construction, etc. A marked decline then occurred, and both volume and value of output were at a minimum in 1932. There was substantial recovery in the following years, the value of clay production increasing from £35,731 in 1932 to £185,802 in 1936, of road materials from £383,544 to £806,860, and of limestone from £35,581 to £99,134. The production of building stone has varied somewhat in recent years with the demand for stone used in the construction of reservoirs. The output of the quarries, as recorded for each year since 1927, is shown below:—

Year.	Output.		Year.	Output.	
	Quantity.	Value.		Quantity.	Value.
	tons.	£		tons.	£
1927	6,043,859	1,521,500	1932	2,580,394	563,409
1928	6,268,636	1,500,082	1933	3,484,950	836,568
1929	6,313,050	1,373,855	1934	4,629,665	875,413
1930	3,779,012	940,836	1935	6,142,119	1,052,989
1931	3,218,619	634,420	1936	7,259,871	1,261,301

#### INSPECTION OF MINES.

The inspection of mines with a view to safeguarding the health and safety of miners is conducted by salaried officers of the Department of Mines in terms of the Coal Mines Regulation Acts, which apply to coal and shale mines, and the Mines Inspection Acts, which apply to other mines.

The Coal Mines Regulation Acts prescribe that every coal mine must be under the control and direction of a qualified manager, and daily personal supervision must be exercised by him or by a qualified under-manager. In mines where safety-lamps are used a competent person must be appointed as deputy to carry out duties for the safety of the mine, especially in regard to the presence of gas, the sufficiency of ventilation, the state of the roof and sides, and the supervision of shot-firers.

The Acts contain general rules for the working of coal mines in regard to such matters as ventilation, sanitation, the inspection and safeguarding of machinery, safety lamps, explosives, security of shafts, etc. It is provided that a person may not be employed in getting coal or shale at the face of the workings of a mine unless he has had two years experience or work in company with an experienced miner. Special rules are established in each mine for the safety, convenience, and discipline of the employees.

A Royal Commission, appointed in July, 1925, conducted an inquiry into conditions operating in the coal mines of New South Wales, with special reference to ventilation, the presence of gas, and the use of safety lamps. As a result of its recommendations the Coal Mines Regulation Act was amended with the object of minimising the risks attached to this class of mining, and Courts of Coal Mines Regulations may be constituted to determine matters relating to the safe working of the coal mines. The Governor may appoint a District Court judge, a stipendiary or police magistrate, or a

mining warden to sit as a Court. Courts have been proclaimed at East Maitland, Newcastle, Muswellbrook, Gunnedah, Sydney, Wollongong, Lithgow, and Mudgee.

The Mines Rescue Act, 1925, makes provision for rescue operations in coal and shale mines by the establishment of rescue stations, rescue corps, and rescue brigades. In four districts, viz., the Western, Southern, Newcastle, and South Maitland, central rescue stations have been established, and the mine owners in each district are required to contribute to a fund for their upkeep. The rates of contribution for the year 1936 were as follow:—Western, 0.80d.; Southern, 0.85d.; Newcastle, 0.80d.; and South Maitland 0.44d. per ton of coal raised during the preceding year. The amount contributed was £22,577 in 1935, and £23,066 in 1936.

In the mines, to which the Mines Inspection Acts relate, a qualified manager, exercising daily personal supervision, must be appointed if more than ten persons are employed below ground, and the machinery must be in charge of a competent engine-driver. General rules are contained in the Act, and the inspectors may require special rules to be constituted for certain mines.

Certificates of competency to act in mines as managers, under-managers, deputies, engine-drivers, and electricians are issued in accordance with the Acts relating to inspection.

Particulars regarding the persons killed or seriously injured in mining accidents during the last ten years are shown below:—

Year.	Accidents.				Per 1,000 Employed.			
	Coal and Shale Miners.		Other Miners.		Coal and Shale Miners.		Other Miners.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1927	24	107	11	58	·98	4·37	·81	4·26
1928	14	103	12	60	·65	4·80	·99	4·94
1929	12	89	10	55	·53	3·96	·82	4·51
1930	16	73	14	63	·77	3·53	1·04	4·69
1931	7	66	13	35	·45	4·19	·78	2·11
1932	13	68	18	28	·90	4·74	1·34	2·09
1933	10	61	18	30	·75	4·56	1·43	2·39
1934	15	56	19	43	1·11	4·16	1·27	2·87
1935	11	61	12	132	·82	4·57	·79	8·72
1936	13	60	14	189	·91	4·22	·93	12·58

The accident rates are not based on the number of employees as shown on page 488. They relate to the total number of persons who are subject to the provisions of the Mining Acts, including persons engaged in connection with treatment plant at the mines, and in quarries held under mining titles. The particulars relating to all quarries are included in the figures for the years subsequent to 1924, with the exception of road workers engaged part time in obtaining gravel, etc. No allowance was made in calculating the rates for variations in the average number of days worked in each year. Particulars of the average time worked in coal mines are shown on page 507.

Allowances paid during 1935 to beneficiaries under the provisions of the Miners' Accident Relief Act amounted to £15,761, and in 1936 to £14,565. The beneficiaries at the end of each year were: widows, 200 and 193; mothers, 11 and 13; sisters, 3; permanently disabled persons, 160 and 146; and children, 39 and 29 respectively.

In the chapter relating to Industrial Arbitration, particulars are given regarding industrial diseases in mines and the compensation provided in cases of accident or illness.

## AGRICULTURE

### AGRICULTURAL ADMINISTRATION.

An outline of the agricultural potentialities of the State of New South Wales was published at page 555 of the Official Year Book, 1928-29. The Department of Agriculture, created by the Government in 1890, functions to advance the interests of farmers and fruit-growers in the State and deals with all matters essential to agriculture. A statement of the major activities of the Department appeared in the 1928-29 issue of the Year Book at page 569. In addition to the research activities of the Department of Agriculture, the Council for Scientific and Industrial Research is also active in the investigation of agricultural problems. The Federal Departments of Commerce and of Trade and Customs also exercise functions affecting agricultural administration.

Boards have been set up to organise marketing and generally assist such industries as dried-fruit growing, apple and pear growing and citrus culture, etc., and there are a number of organisations seeking to advance farming interests, of which typical examples are the Agricultural Bureau, the Farmers and Settlers' Association, the Wheatgrowers' Union of New South Wales and the Fruitgrowers' Association. A number of periodicals devoted to agricultural subjects are published and circulate throughout the State.

#### *Australian Agricultural Council.*

Questions of marketing, organisation and control of agricultural production have come into great prominence in recent years, and in recognition of the need for uniformity of action throughout the Commonwealth, Federal and State Ministers who met in Canberra in December, 1934, decided that a permanent organisation, to be known as the Australian Agricultural Council, should be set up. The council consists of the Ministers representing the agricultural administration of the States and the marketing administration of the Commonwealth, while other State or Federal Ministers may be co-opted as required. To advise the council and guide its deliberations, a permanent technical committee, known as the Standing Committee on Agriculture, was appointed, its members comprising the permanent heads of State agricultural departments, members of the executive of the Council for Scientific and Industrial Research, the Secretary of the department of Commerce, and the Director General of Health.

The council functions to foster the welfare and development of the agricultural industries generally, the improvement of the quality of agricultural products and the maintenance of high grade standards. It will seek, as far as may be, to relate the type and value of production to available markets, develop systems of organised marketing, and broadly, to co-ordinate Australian agricultural activities into a national system.

Specific responsibilities of the Standing Committee on Agriculture include the devising of means to secure co-operation in, and co-ordination of agricultural research throughout the Commonwealth, and in administration of quarantine in respect of pests or diseases of plants and animals. It will also advise the Federal or State Governments, either directly or through the council, regarding entry upon or the development of research on agricultural problems, and as to questions of quarantine control.

The inaugural official meeting of the Australian Agricultural Council was held at Canberra on 28th May, 1935.

## AGRICULTURAL YEAR.

Until 1931 statistics relating to primary production were collected for years ended 30th June; as from 1932 they relate to periods of twelve months ended 31st March. The alteration makes possible more prompt publication of essential statistical data, and does not interfere in any material degree with statistical comparisons. Except in the case of a few minor crops, the production season is as fully embraced within a period of twelve months ending 31st March as in a period of twelve months ending 30th June.

## AREA OF AGRICULTURAL LANDS.

A brief historical note on the growth of agriculture was published on page 709 of the Official Year Book, 1921, and a comparison of the areas cultivated in divisions of the State since 1905 appeared on page 712.

The progress of cultivation since 1891, in quinquennial periods, is shown in the following table:—

Years ended 30th June—	Area under—		Acres per Inhabitant under—	
	Cultivation and Sown Grasses.	Crops.	Cultivation and Sown Grasses.	Crops.
	acres.	acres.		
	<i>Average Area per Annum.</i>			
1891-95	1,398,199	1,048,554	1·18	0·88
1896-00	2,252,649	1,894,857	1·73	1·46
1901-05	2,942,506	2,436,765	2·10	1·74
1906-10	3,575,873	2,824,253	2·34	1·84
1911-15	5,187,850	4,025,165	2·93	2·27
1916-20	6,011,049	4,615,913	3·09	2·37
1921-25	6,599,048	4,665,362	3·04	2·15
1926-30	7,149,119	5,014,364	2·98	2·09
1931-35	8,424,349	6,042,593	3·25	2·33
	<i>Area in each Year.</i>			
1927	6,632,602	4,595,711	2·79	1·93
1928	7,175,367	4,994,515	2·95	2·05
1929	7,641,853	5,440,762	3·08	2·19
1930	7,736,500	5,499,408	3·07	2·18
1931	8,959,974	6,809,510	3·52	2·68
1932*	7,649,880	5,107,049	2·98	1·99
1933*	8,608,889	6,330,370	3·32	2·44
1934*	8,725,850	6,281,477	3·34	2·40
1935*	8,177,170	5,684,558	3·10	2·16
1936*	8,452,774	5,730,315	3·18	2·16

\*Year ended 31st March.

About 80 per cent. of the area under crop is sown with wheat, and as other individual crops are of relatively small extent (as may be seen by reference to the graph at page 520), the fluctuations in the area under crops are due mainly to variations in the extent of wheat-growing. The area of land under sown grasses (2,722,459 acres in 1935-36) is steadily increasing, and consists principally of lands in the coastal districts, cleared and sown with grasses for the maintenance of dairy stock. The cultivation of grasses in inland areas, however, has recently increased rapidly (from 173,377 acres in 1932-33 to 445,853 acres in 1935-36) mainly in the Tablelands, the Western Slopes and the Riverina, where the practice is being adopted as a means of increasing the carrying capacity of holdings used for pastoral purposes.

Particulars obtained in 1936 indicated that of 172,456,676 acres of alienated land and Crown lands used for agricultural and pastoral purposes,

a total area of 29,735,601 acres was, in the opinion of occupiers, suitable for cultivation after the removal of standing timber where existing. Approximately 8 per cent. of the land included in this area is situated in the western Division of the State, where the inadequate rainfall has so far prevented agricultural production on a commercial scale. In 1931, the last year for which the information was collected, the area of holdings 1 acre or more in extent used directly or indirectly for agriculture was returned as 9,679,649 acres, inclusive of both alienated and Crown lands.

The following table shows the divisional distribution of agricultural lands during the season 1935-36. The divisions referred to are shown on the map forming the frontispiece of this Year Book:—

Area of Alienated and Crown Lands.

Division.	Total area of division.	Under occupation in holdings of 1 acre and over.	Under crops.	Under sown grasses.	New land cleared and prepared for ploughing.	Fallow land, etc.	Previously cropped.	Balance of area.	Suitable for cultivation.	Proportion of suitable area cultivated.
	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	per cent.
<b>Coastal—</b>										
North Coast	6,965	4,713	128	1,640	2	3	18	2,922	556	23·0
Hunter and Manning.	8,396	4,983	119	441	3	6	20	4,394	432	27·5
Metropolitan	958	291	34	7	2	2	5	241	158	21·5
South Coast...	5,968	2,245	56	189	2	2	16	1,980	373	15·0
Total ...	22,287	12,232	337	2,277	9	13	59	9,537	1,519	22·2
<b>Tableland—</b>										
Northern ...	8,069	6,498	80	29	4	4	38	6,343	453	17·7
Central ...	10,716	7,642	394	78	25	116	289	6,740	1,736	22·7
Southern ...	7,062	5,634	42	33	3	5	43	5,508	440	9·5
Total ...	25,847	19,774	516	140	32	125	370	18,591	2,629	19·6
<b>Western Slopes—</b>										
North ...	9,219	8,264	451	40	32	84	102	7,465	1,863	24·2
Central ...	7,723	6,937	1,047	58	53	408	770	4,601	4,273	24·5
South ...	11,239	9,992	1,369	128	42	784	1,071	6,598	5,151	26·6
Total ...	28,181	25,193	2,867	226	127	1,276	2,033	18,664	11,287	25·4
<b>Central Plains—</b>										
North ...	9,579	7,623	198	10	28	38	84	7,265	1,506	13·1
Central ...	14,811	13,315	348	2	24	147	256	12,538	3,425	10·2
Riverina ...	17,004	16,026	1,446	67	44	879	1,268	12,322	7,164	20·2
Total ...	41,394	36,964	1,992	79	96	1,064	1,608	32,125	12,095	16·5
<b>Western</b>										
... ..	80,319	78,294	19	...	4	2	12	78,257	2,206	0·0
<b>All Divisions</b>	<b>198,028</b>	<b>172,457</b>	<b>5,731</b>	<b>2,722</b>	<b>268</b>	<b>2,480</b>	<b>4,082</b>	<b>157,174</b>	<b>29,736</b>	<b>19·3</b>

The total area of land alienated, or virtually alienated, in holdings of one acre and over, used or pastoral and farming purposes was 78,981,583 acres.

In addition to the area of land under crops in 1935-36 (shown above) an area of 267,822 acres of new land was cleared and grubbed for ploughing, 2,480,420 acres were ploughed and worked during the year, and 4,081,736 acres of previously cropped land were not ploughed in that season. These particulars embrace both alienated and Crown lands, but the area of Crown lands under cultivation of any kind is relatively small.

## NUMBER OF AGRICULTURAL HOLDINGS.

A consideration of the number of holdings on which land was cultivated, and the number of crops grown, affords guidance as to the popularity of the various crops.

The number of such holdings, and the number of crops cultivated on them at intervals since 1900-01 are shown in the following statement.

Kind of Crop.	Number of Holdings upon which Crop was grown.						
	1900-01.	1905-06.	1915-16.	1925-26.	1930-31 †	1934-35.†	1935-36.†
Wheat ... ..	20,149	19,049	22,453	17,074	18,171	17,583	17,220
Maize ... ..	17,569	17,475	14,869	15,196	15,435	17,407	17,727
Barley ... ..	2,246	1,755	2,538	1,916	1,667	1,228	1,328
Oats ... ..	11,547	10,740	13,723	16,851	18,098	20,532	20,627
Rice ... ..	...	...	...	...	270	290	304
Lucerne ... ..	...	...	...	7,033	7,448	10,522	10,825
Potatoes ... ..	9,521	8,552	4,643	3,679	2,492	3,411	4,093
Tobacco ... ..	31	98	97	111	86	77	89
Sugar-cane ... ..	1,214	1,113	694	955	917	1,154	823
Grapes ... ..	1,832	1,530	1,888	1,809	1,592	1,585	1,505
Orchards† — Citrus	1,905	2,385	5,787	5,778	4,638	4,186	3,997
Other ... ..	8,064	6,846	8,760	7,218	5,538	5,336	5,281
Bananas ... ..	...	...	...	214	754	2,117	1,745
Market Gardens ...	2,266	2,842	3,301	2,398	1,603	1,477	1,506
Number of Cultivated Holdings*	45,828	46,349	50,728	49,668	49,391†	52,186†	52,339†

\* Holdings on which more than one crop was grown are included once only.

† Excluding crops

of less than one acre, which were included in 1925-26 and earlier years.

† Orchards are

included in both groups if citrus, as well as other fruits, are grown. The number of orchards of one acre or more was 7,886 in 1932-33, 7,744 in 1933-34, 7,072 in 1934-35, and 7,520 in 1935-36.

The number of farms on which wheat is sown is subject to seasonal fluctuations, but, in the past thirty years, it has declined notwithstanding a large increase in the area devoted to this crop. Small areas of maize and oats are cultivated by many farmers for use on their farms, though the area under wheat is many times greater than the area under maize or oats. Moreover, portion of the area under wheat—varying from one-fourth to one-seventh—is cultivated on the “shares” system, by which a number of growers may be engaged in cultivating one holding. Lucerne growing, both for hay and green food, has extended; an area of 452,630 acres was under lucerne in 1935-36 compared with 170,190 acres in 1925-26.

The total number of holdings of one acre and upwards used for agricultural, dairying, or pastoral purposes in 1935-36 was 75,631, and areas of one acre or more in extent were cultivated on 52,339 holdings. Only 10,293 holdings were used mainly for agricultural purposes. In addition, 15,995 holdings were used for agricultural and pastoral pursuits combined, 4,066 for agriculture with dairying, 1,834 for all three pursuits combined, and a limited amount of cultivation of a non-commercial character was conducted in connected with other activities. There were, in all, 23,292 holdings on which there was no cultivation or less than 1 acre under crop.

AGRICULTURAL PRODUCTION.

The area and production of the principal crops of New South Wales are shown below:—

Crop.	1915-16.	1925-26.	1930-31.	1934-35.	1935-36.
Wheat (grain)—					
Area ... .. acres	4,188,865	2,925,012	5,134,960	3,892,768	3,851,373
Total yield ... .. bush.	66,764,910	33,806,000	65,877,000	48,678,000	48,822,000
Average yield p.a. ... bush.	15·9	11·6	12·8	12·5	12·7
Maize (Grain)—					
Area ... .. acres	154,130	120,955	105,024	115,570	119,849
Total yield ... .. bush.	3,773,600	3,278,350	2,766,660	3,238,590	3,324,780
Average yield p.a. ... bush.	24·5	27·1	26·3	28·0	27·7
Oats (grain)—					
Area ... .. acres	58,636	101,097	176,659	237,405	279,622
Total yield ... .. bush.	1,345,698	1,615,650	3,241,980	3,856,680	4,735,740
Average yield p.a. ... bush.	23·0	16·0	18·4	16·2	16·9
Rice—					
Area ... .. acres	..	1,556	19,825	21,738	21,705
Total yield ... .. bush.	..	61,098	1,427,413	1,888,430	2,163,520
Average yield p.a. ... bush.	..	39·3	72·0	86·9	99·7
Hay†—					
Area ... .. acres	1,108,919	750,605	896,770	757,414	658,810
Total yield ... .. tons	1,573,938	866,275	1,191,696	1,004,761	837,386
Average yield p.a. ... tons	1·42	1·15	1·33	1·33	1·27
Green Feed Crops—					
Area ... .. acres	162,945	479,464	310,341	477,060	610,401
Potatoes—					
Area ... .. acres	19,589	22,731	15,304	19,662	22,743
Total yield ... .. tons	44,445	43,137	32,283	46,033	62,382
Average yield p.a. ... tons	2·27	1·90	2·11	2·34	2·76
Sugar-cane—					
Area cut ... .. acres	6,030	8,688	7,617	7,572	10,416
Total yield ... .. tons	157,748	297,335	160,209	227,424	280,472
Average yield p.a. ... tons	26·16	34·22	21·03	30·0	26·93
Fruit—					
Area ... .. acres	63,823	89,003	93,539	102,178	97,860
Market Gardens—					
Area ... .. acres	10,967	8,985	7,448	6,696	7,026
Total yield ... .. £	400,860	682,726	465,977	336,665	349,261
Average yield p.a. ... £	36·6	76·0	62·5	50·3	49·7
All other Crops—					
Area ... .. acres	26,843	35,445	43,760	49,925	55,876
Total Area* ... acres	5,800,747	4,543,541	6,811,247	5,687,988	5,735,681

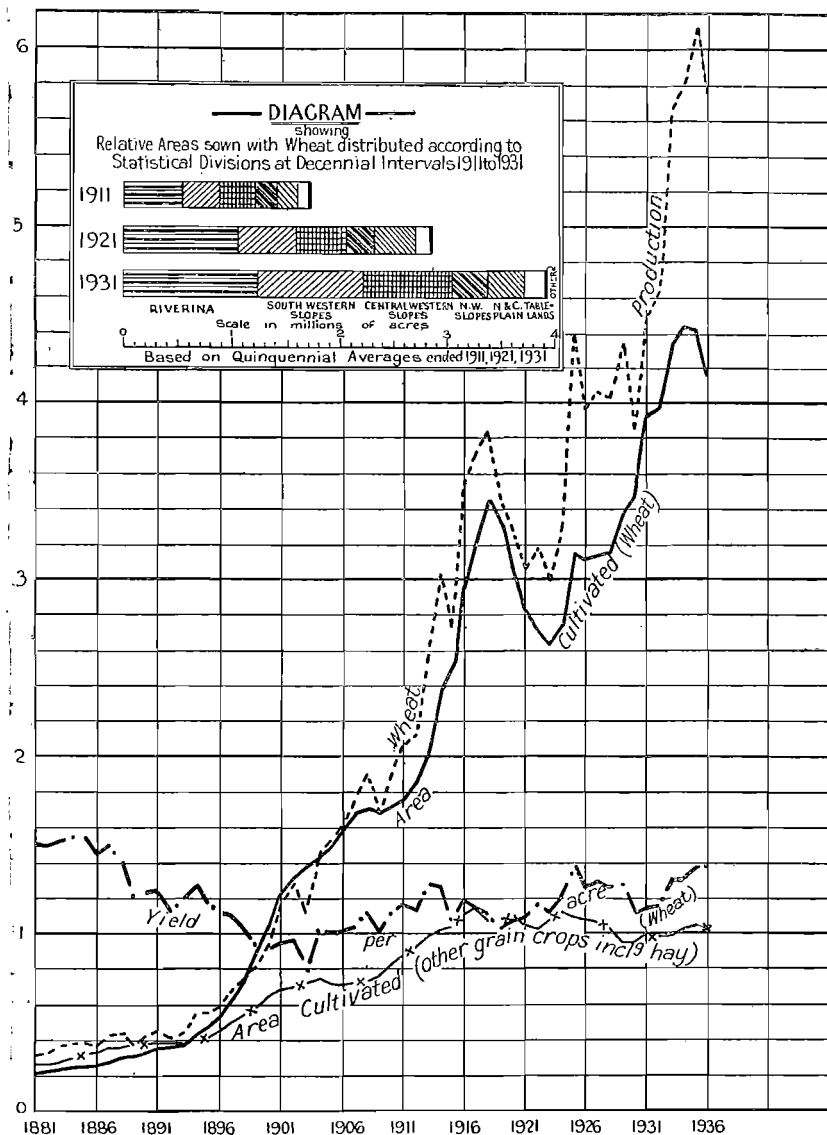
\* Including area double-cropped. † Mainly wheaten, oaten, and lucerne.

It will be observed that wheat is the only crop extensively grown. The relatively large areas sown in 1915-16 and 1930-31 represented a response to special appeals. A large but a declining proportion of the area cut for hay is sown with wheat, and considerable proportions are used for the production of oats and wheaten hay.† Reference to the graphs at page 520 and 564 shows that the cultivation of wheat and oats over the past 55 years has been generally increasing while maize-growing has decreased. Details of each of these crops are shown on later pages.

† See pages 533 and 570.

## WHEAT GROWING IN NEW SOUTH WALES.

Area, Production and Average Yield, 1881-1936.



The graph has been prepared on the basis of quinquennial averages ended in each year as shown.

The numbers at side of graph represent : for wheat area, millions of acres ; for wheat production, tens of millions of bushels ; for yield of wheat per acre, tens of millions of bushels, and for area of other crops, millions of acres.

*Value of Agricultural Production.*

The estimated value of the agricultural production of the State during the last five seasons and the proportionate value of each crop to the total value are shown in the following table, the values being based on prices realised on the farm or at nearest railway siding:—

Crop.	Value at Place of Production.					Proportion per cent.				
	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1931-33.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£					
Wheat (grain) .. ..	*8,130,809	*9,853,750	*7,013,260	*7,149,550	*8,137,000	55.9	56.4	49.0	47.2	48.4
Maize „ .. ..	417,120	567,030	339,490	458,810	644,150	2.9	3.3	2.4	3.0	3.8
Barley „ .. ..	17,990	17,430	17,890	23,370	28,680	0.1	0.1	0.1	0.2	0.2
Oats „ .. ..	126,820	248,890	291,370	342,280	394,630	0.9	1.4	2.0	2.3	2.3
Rice „ .. ..	263,180	304,820	337,600	336,080	354,620	1.8	1.7	2.4	2.2	2.1
Hay and Straw ...	1,491,830	1,816,220	2,083,900	2,476,670	2,227,210	10.3	10.4	14.6	16.3	13.3
Green Food .. ..	977,120	1,048,590	1,014,330	1,054,040	1,179,050	6.7	6.0	7.1	6.9	7.0
Potatoes .. ..	152,110	113,960	143,660	320,530	394,580	1.0	0.7	1.0	2.1	2.8
Sugar-cane .. ..	300,080	225,430	325,430	346,310	354,820	2.1	1.3	2.2	2.3	2.3
Grapes .. ..	253,130	271,290	234,680	202,510	243,070	1.7	1.6	1.7	1.3	1.5
Wine, Brandy, etc. ..	65,460	73,070	83,430	71,260	95,810	0.5	0.5	0.6	0.4	0.6
Fruit—Citrus .. ..	562,700	570,510	574,900	490,400	584,060	3.9	3.3	4.0	3.3	3.5
Other .. ..	647,990	1,235,930	1,018,690	1,040,980	1,147,810	4.4	7.1	7.1	7.0	6.8
Market-gardens ..	385,310	335,170	301,550	336,670	349,260	2.6	1.9	2.1	2.2	2.1
Other Crops .. ..	755,920	761,530	516,810	506,310	629,970	5.2	4.3	3.7	3.3	3.8
Total .. ..	14,546,650	17,474,220	14,301,990	15,161,280	16,795,980	100	100	100	100	100

\* Including Commonwealth Government bounty (and State assistance in 1932-33) amounting to £950,000 in 1931-32; £1,014,449 in 1932-33; £911,004 in 1933-34; £1,121,600 in 1934-35; and £564,368 in 1935-36; equivalent to approximately 4½d., 3d., 4d., 5½d., and 2½d. per bushel, respectively.

The agricultural income of New South Wales depends mainly on the return from wheat crops, the value of wheat, grain and hay, in 1935-36 being £8,764,350 or over 52 per cent. of the total. The returns from other individual crops, except fruit, are comparatively small.

Due to the heavy fall in prices, the aggregate value of agricultural production in 1930-31 was lower than in any post-war year and only approximately 57 per cent. of the average value for the five years ended 1928-29. The low levels and the slow recovery of wheat prices during the years 1931-32 to 1935-36 were the outstanding factors determining the returns from agriculture, with the record wheat harvest of 1932-33 the cause of a sharp improvement in that year. Better wheat prices more than offset a decline of 14 per cent. in wheat production in 1934-35 and with production higher and prices rather better for practically all important agricultural products, an upward trend of the value of agricultural production was initiated. Mainly owing to a material improvement in wheat and maize prices, increased production of oats, and better returns from orchards, the total value for 1935-36 was 10.8 per cent. greater than for the preceding year, though still about 20 per cent. below the average for the five years ended 1928-29. Government aid to agriculturists assisted to sustain the value of production in each of the last five years indicated.

No deduction has been made from the values shown above for cost of materials used in production. Seed wheat is included in the production of grain, and the fodder used for farm stock is included at its farm value. Exclusive of materials used in maintenance of buildings, fences, etc., the cost of materials in 1935-36 was approximately £2,657,000. The principal items were: Fodder for stock, £1,354,000; seed, £628,000; fertilisers, £522,000 sprays, etc., £73,000; and water, £80,000. After deducting these, the net value of production was £14,139,000 to the farmer.

*Value of Production per Acre.*

The following table, showing the value of agricultural production, together with the average per acre, affords an interesting summary of the expansion of agricultural pursuits and a measure of the condition of the industry:—

Years ended 30th June—	Average Annual Area Cultivated.	Average Annual Value of Production.	Average Value per Acre.
	acres.	£	£ s. d.
1887-91	858,367	4,030,611	4 13 11
1892-96	1,147,733	3,812,393	3 6 5
1897-1901	2,114,250	5,592,620	2 12 11
1902-06	2,515,268	6,302,903	2 10 1
1907-11	2,933,021	8,565,164	2 18 5
1912-16	4,507,748	12,867,474	2 17 1
1917-21	4,349,814	16,986,270	3 17 8
1922-26	4,650,110	22,328,630	4 15 5
1927-31	5,467,982	16,842,398	3 1 7
1932-36*	5,826,754	14,656,024	2 13 9
1932*	5,107,049	14,546,650†	2 17 0
1933*	6,330,370	17,474,220†	2 15 2
1934*	6,281,477	14,301,990†	2 5 6
1935*	5,684,558	15,161,260†	2 13 4
1936*	5,730,315	16,795,960†	2 18 7

\* Season ended 31st March.

† Including Wheat Bounty.

The comparatively high value of production per acre shown in the ten years prior to 1897 was due to the fact that agriculture was on a smaller scale; crops produced by intense cultivation were a larger proportion of the total than in recent years. The increased values shown between 1912-16 and 1922-26 were due mainly to the higher level of prices received for produce concurrently with the general rise in prices, but the influence of this factor is affected by variations in the yield per acre. The pronounced influence of the fall in prices which was precipitate after 1928-29 and the partial recovery of the last two years are shown in the following comparisons of the average farm value per acre of various crops:—

Crop.	Average Values per Acre.						
	Ten years ended 1913-14.	Five years ended 1933-34.	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Wheat for Grain...	1 17 1	1 12 2	1 0 4	2 1 1	1 10 7	1 16 9	2 2 3
Maize for Grain ...	4 6 11	4 10 5	3 13 0	5 3 7	2 17 11	3 19 5	5 7 6
Oats for Grain ...	2 4 9	1 6 7	1 0 8	1 10 5	1 8 7	1 18 10	1 8 3
Hay ...	3 8 9	3 0 7	2 12 8	2 16 2	2 17 8	3 5 3	3 7 6
Potatoes ...	11 2 5	8 11 0	11 1 6	5 9 11	7 3 0	16 6 0	17 8 0
Sugar-cane†	21 9 4	34 2 5	36 14 5	28 18 4	32 9 11	45 16 1	36 18 11
Vineyards†	16 12 4	23 2 5	20 16 5	24 15 1	22 7 11	19 6 5	23 19 8
Orchards†	10 17 9	23 10 11	20 2 8	24 4 8	20 6 5	21 4 5	24 7 2
Market-gardens ...	31 7 5	61 13 8	62 11 3	55 8 7	53 4 10	50 5 7	49 14 2

† Productive area only.

The average value of production per acre measures the effect from year to year of yield obtained and prices realised, therefore it may be said to furnish an index of the combined effect of market and season on the average returns obtained by farmers from their holdings. To make the analysis a complete reflex of the condition of agriculture, modifying factors, such as

the cost of production, the general level of prices, drought, and other causes of loss, should be taken into consideration. Low prices were predominant as a factor in the levels to which the average value per acre of principal crops have fallen in recent years. As the preceding table indicates, the returns from oats, hay, and maize (excepting maize in 1932-33 and 1935-36), have been below the pre-war average since 1930-31.

*Gross and Net Values of Agricultural production.*

In the absence of actual records of farm sales and purchases there is considerable difficulty in valuing agricultural production, and the best estimates with available data can be regarded only as approximations.

Valuations, however, are shown below on various bases for each of the ten seasons 1926-27 to 1935-36.

Year ended 30th June.	Gross Production valued at Principal Markets.	Difference between Principal Market and Country Prices.	Gross Production valued at Place of Production.	Seed used and Fodder for Farm Stock used in Agricultural Work.	Net Production valued at Farm or nearest rail siding.	Value of Principal Materials used.	Net Value of Production after deducting Materials.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(Thousand £.)							
1927	26,019	4,203	21,816	3,322	18,494	751	17,743
1928	18,836	3,392	15,444	2,378	13,066	929	12,137
1929	23,800	4,444	19,356	2,724	16,632	1,001	15,631
1930	18,839	3,570	15,269	2,922	12,347	974	11,373
1931	17,196	4,868	12,328	1,579	10,749	973	9,776
1932*	18,368	3,821	14,547	1,027	13,520	551	12,969
1933*	22,441	4,967	17,474	1,698	15,776	652	15,124
1934*	18,606	4,304	14,302	1,841	12,461	737	11,724
1935*	19,439	4,278	15,161	1,774	13,387	600	12,787
1936*	20,805	4,009	16,796	1,982	14,814	675	14,139

\* Year ended 31st March.

It should be noted that the figures shown in the table with reference to the net value of production leave out of account depreciation on machinery and plant. This course has been considered advisable owing to the difficulty encountered in arriving at a reasonably reliable measurement of the amount of depreciation. Depreciation in each of the respective years since 1927 is given as £959,000, £984,000, £1,085,000, £1,088,000, £1,096,000, £1,053,000, £953,000, £887,000, £861,000, and £849,000.

The second column provides a relative measure of the importance of agricultural production to the community by valuing all items on a common basis. It is inclusive of the value of transport, handling and marketing services rendered after the products leave the railway siding nearest the farm and up to the point of sale in metropolitan markets. It has, however, the disadvantage of including values for such services on products which remain on the farms or which are sold to neighbouring landholders. The third column includes what may be called "costs of marketing" (freights handling charges, commissions, etc.) that would have been paid if all products had been sold in the principal markets; the ratio to the totals in the second column varies under the influence of changes in the volume and composition of agricultural production as well as changes in price levels, freights, commissions, etc. The figures in the fourth column are those published in a preceding table and are inclusive of the estimated value of seed and fodder used in the course of production. The value placed on these is

shown in the fifth column and the effect of deducting them is shown in the sixth column, which represents, as nearly as may be with existing data, the approximate money return to farmers for agricultural products, though it is inclusive of agricultural products used in other rural industries valued at £3,240,000 in 1935-36. The seventh column represents approximately the value of the principal non-rural materials used in agricultural production, and the eighth is the net value of agricultural production excluding the approximate value of the principal goods and services provided by non-rural industries. It represents approximately the aggregate incomes of farmers and their employees from agricultural production without deductions for interest, depreciation, etc., on farm properties, implements, machinery, etc.

Deductions as to the economic status of the average agricultural producer cannot be made from comparisons of the net value of production without important qualifications. It is obvious that the *real* value to the farmer is conditioned by the command which is acquired over the goods and services that the farmer buys. Consequently it would be necessary, in order to determine the *real* income accruing to agriculturists, to relate changes in the *nominal* value of production to changes in the level of prices of things upon which farm income is expended. In the absence of an index showing the latter variations it is not practical to assess, with any degree of precision, the *real* income arising from agricultural production. Moreover, it will be appreciated that such generalisations take no account of inequality in rural incomes arising from the fact that many farmers confine their activities wholly to the production of such commodities as wool, or wheat, or butter, etc., markets for which many show, and have shown, great departure from the general trend. But, in a general way, it may be noted that although the net value in 1935-36 was 9.5 per cent. less than in 1928-29, the return to the farmers, in terms of immediate purchasing power was not so greatly below that in the pre-depression years as direct comparisons would imply.

#### WHOLESALE PRICES OF AGRICULTURAL PRODUCE.

The prices realised for agricultural produce in New South Wales, when not regulated by an authority, vary with the seasons, or, as in the case of wheat, with world markets, and, therefore, show very great fluctuations. In times when export prices fall steeply and remain at low levels for an extended period (as between 1931 and 1936) the prices of all agricultural products are apt to fall on account of the general collapse of values. Wheat and flour, in which alone there is a more or less regular external trade, were closely regulated in price between 1914 and 1922. The prices of flour, bran, and pollard, are generally determined by the Flour Mill Owners' Association of New South Wales. Funds to assist wheat-growers have been derived from a levy on flour for local consumption—under the State Flour Acquisition Act, of £2 15s. per ton from 30th March to 31st December, 1931, and of £1 10s. per ton from that date until 3rd December, 1933, when, under the Commonwealth Wheat Growers Relief Act, 1933, a tax of £4 5s. per ton became operative and continued until 31st May, 1934. No tax was in force from then until 7th January, 1935, from which date until 24th February, 1936, under the Commonwealth Flour Tax Act (No. 3), 1934, tax was payable at the rate of £2 12s. 6d. per ton. Flour has not been subject to tax since February, 1936. Account has been taken of the tax in the average price of flour shown in the appended table. In the case of other produce, local production falls short of the requirements of the State, importation is usually necessary, and prices for these commodities are determined partly by external market conditions.

The quotations here given represent the average prices obtained for farm products (local and imported) in the various Sydney markets; for country districts due allowance must be made for cost of transportation, etc. The average for the year represents the mean of the prices ruling during each month, and does not take into account the quantity sold during the month. The prices ruling in each month, *i.e.*, the mean of the daily quotations, are shown in the "Statistical Register." Except in the case of wheat, the figures are those quoted by the middleman, and not those obtained by the producers:—

Commodity.	1911.	1921.	1931.	1932.	1933.	1934.	1935.	1936.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Wheat (f.a q. bagged) bush.	0 3 6	0 8 8	0 2 5½	0 3 0½	0 2 10½	0 2 8½	0 3 2½	0 4 2½
Flour (at Mill) .. ton	8 9 10	19 6 7	9 11 4*	9 16 11*	9 13 4*	9 5 7*	10 19 10½	10 17 16*
Bran .. bush.	0 0 11½	0 1 7½	0 0 9½	0 1 0	0 0 11	0 0 10½	0 1 0½	0 1 8
Pollard .. "	0 0 11½	0 1 8½	0 0 9½	0 1 0½	0 0 11½	0 1 0	0 1 0½	0 1 8½
Oats .. "	0 2 7½	0 3 5½	0 2 7½	0 1 11	0 2 8	0 2 7	0 2 5½	0 2 4½
Maize .. "	0 3 0	0 5 3½	0 3 7½	0 4 8½	0 4 4	0 3 1½	0 4 2½	0 4 9½
Potatoes (local) .. ton	5 11 4	6 0 2	6 10 9	5 14 7	4 12 0	6 17 10	9 4 1	7 4 3
Onions .. "	5 15 10	5 12 1	7 0 7	14 7 9	6 0 4	10 6 4	9 14 7	13 17 7
Hay—								
Oaten .. "	4 14 5	7 11 10	5 10 0	6 4 6	6 11 1	7 2 9	7 15 2	7 7 1
Lucerne .. "	3 5 0	5 18 5	4 8 1	4 9 4	4 8 4	4 0 8	5 3 3	5 12 5
Chaff—								
Wheaten .. "	4 0 11	6 8 8	3 18 3	3 18 9	4 4 8	4 9 1	4 11 1	4 14 4

\* Includes State Flour Tax of £2 5s. from 30th March, 1931, £1 10s. from 1st January, 1932 to 2nd December, 1933; Federal Tax of £4 5s. from 4th December, 1933 to 31st May, 1934, and £2 12s. 6d. from 7th January, 1935, to 24th February, 1936.

The combined price variations since 1901 of Agricultural produce in Sydney markets, weighted according to the average consumption in New South Wales in the three years 1911-13, are shown below. The prices in 1911 have been adopted as base and called 1000.

Year.	Index Number.	Year.	Index Number.	Year.	Index Number.
1901	834	1913	1069	1925	1680
1902	1266	1914	1135	1926	1892
1903	1181	1915	1648	1927	1767
1904	789	1916	1163	1928	1456
1905	972	1917	1127	1929	1707
1906	929	1918	1377	1930	1428
1907	1003	1919	1990	1931	1061
1908	1343	1920	2430	1932	1137
1909	1134	1921	1750	1933	1122
1910	1012	1922	1638	1934	1114
1911	1000	1923	1720	1935	1279
1912	1339	1924	1475	1936	1299

The foregoing index, being weighted on a consumption basis, is to be viewed rather from the standpoint of prices paid by consumers than of prices paid to producers.

From 1921 to 1929 the agricultural price level was relatively stable at a high figure despite marked seasonal fluctuations, but in May, 1930, there occurred a collapse in the wheat markets of the world unprecedented in the period of 34 years in which there has been an oversea trade in wheat from New South Wales. The heavy fall was fully reflected in the local price of wheat, which in turn affected the prices of wheat products and of other grains. Seasonal factors and general depression affected the prices of other commodities, and the index of agricultural prices fell rapidly to 997 in March, 1931, and remained in the vicinity of the level of 1911 until after mid-year. Without displaying continuity of trend for more than a few

months together, the index numbers fluctuated generally between from 10 to 12 per cent. above the 1911 average during most of 1932 and 1933. A downward movement, initiated in September, 1933, persisted until in June, 1934, the index had declined to the lowest post-war level of 994. Thereafter prices of agricultural produce rose irregularly, and consistently from February until October, 1935, when at 1388 the index attained its highest level for over five years. Following a decline of about 16 per cent. over the next five months the index number resumed an upward trend which, due to rising wheat prices, became very emphasised in the closing months of 1936, by the end of which year a level within 10 per cent. of the average for the years 1926-29 had been attained. A decline of the index number from 1561 to 1422 over the next three months was almost wholly recovered by June, 1937, when the index number (1530) was less than 2 per cent. below the post depression peak of December, 1936. Later index numbers are published in the "Statistical Bulletin" of New South Wales which is issued quarterly.

#### AGRICULTURAL MACHINERY.

The following statement shows the area cropped, the total value of the agricultural machinery used, and the value of the machinery used per acre, in divisions of the State in the year 1935-36:—

Division.	Area under Crop, 1935-36.	Value of Agricultural Machinery and Implements.		Average value per Acre of Machinery used 1935-36.
		1925-26.	1935-36.	
	acres.	£	£	£ s. d.
Coastal ... ..	336,549	1,032,175	1,138,338	3 7 8
Tableland ... ..	516,083	1,261,461	1,055,829	2 0 10
Western Slopes ... ..	2,866,787	4,444,030	4,073,531	1 8 5
Central Plains and Riverina.	1,992,184	2,785,830	2,712,221	1 7 3
Western ... ..	18,712	64,822	59,107	3 3 2
Total ... ..	5,730,315	9,588,318	9,039,026	1 11 7

The value of agricultural machinery and implements declined from £10,955,923 in 1929-30, to £8,486,935 in 1934-35 or by approximately 23 per cent. in five years. Adverse conditions prevailing in the industry in these years apparently prevented the normal installation and replacement of agricultural machinery, but with an improvement in the agricultural situation there was an increase of 6½ per cent. in the value of machinery and implements used in 1935-36.

In the coastal and tableland districts the areas under cultivation are small, including many small holdings highly developed for fruit-growing, dairying and market gardening, while on the tablelands, slopes and plains the implements in use serve large areas under wheat and oats. In the Western Division are a number of small irrigation settlements, but the area farmed there is too small to give an average which might be considered satisfactory for purposes of comparison.

#### Power-driven Machinery on Farms.

Particulars of the power-driven machinery and of the numbers of other machines and implements used on farms in New South Wales as at the 30th June, 1930, were shown on page 196 of the Year Book for 1930-31.

PERSONS ENGAGED IN AGRICULTURE.

The following table provides an interesting comparison of the number of persons returned by land-holders as being constantly engaged on rural holdings with agriculture as their principal activity. The particulars include working proprietors, unremunerated members of the family working on the holding, and permanent employees.

Year.	Persons Permanently Engaged.*	Area under Crop.	Value of Machinery Used.	Year.	Persons Permanently Engaged.*	Area under Crop.	Value of Machinery Used.
	No.	acres.	£		No.	acres.	£
1913-14	59,813	4,568,841	5,020,938	1925-26	43,365	4,541,423	9,588,318
1914-15	58,020	4,808,627	5,159,959	1926-27	41,650	4,595,711	9,837,193
1915-16	56,904	5,794,835	5,362,027	1927-28	42,293	4,994,515	10,849,513
1916-17	52,758	5,163,030	5,449,657	1928-29	38,275	5,440,762	10,883,551
1917-18	48,386	4,460,701	5,615,995	1929-30	38,049	5,499,408	10,955,923
1918-19	43,823	3,890,844	5,696,916	1930-31	38,224	6,809,510	10,526,391
1919-20	47,392	3,770,155	6,128,753	1931-32	37,260	5,107,049	9,526,396
1920-21	48,896	4,464,342	7,120,381	1932-33	40,279	6,330,370	8,869,795
1921-22	47,268	4,445,848	7,884,713	1933-34	39,716	6,281,477	8,607,639
1922-23	48,154	4,694,088	8,536,164	1934-35	38,725	5,684,558	8,486,935
1923-24	46,823	4,808,046	8,799,353	1935-36	38,796	5,730,315	9,039,026
1924-25	46,278	4,911,148	9,427,730				

\* Landowners, members of their families and employees engaged principally in cultivating the soil.

The decline in the number of persons engaged in agriculture from 1914 to 1919 was probably due mainly to enlistments for military service, although the adverse conditions ruling in the industry exercised a depressing influence. This latter cause doubtless operated to a marked extent during the severe drought which prevailed between 1918 and June, 1920. The number increased as a result of the demobilisation of large numbers of the expeditionary forces after the cessation of hostilities, although in 1919-20 there was an almost complete failure of the wheat crops of the State, and agricultural operations were considerably restricted.

Subsequently further decline occurred and the number of persons engaged permanently in agriculture is now about one-third less than in the years immediately preceding the war although the area under crop is greater. The explanation apparently lies in the more extensive use of tractors and in the improvements in agricultural machinery by which the capacity of the ploughs, harvesters, reapers and binders and other plant has been increased in such a way that less man power is required to cultivate the greater area of land devoted to agriculture. Moreover, the speedier means of transport by reason of the substitution of motor vehicles for the horse-drawn, and the extension of railway facilities, have enabled the farmers to effect a considerable saving in labour. The decrease between 1928 and 1929 may be due partly to a change in the basis of classification, but the depressed condition of the industry was undoubtedly responsible for the decline until 1931-32. Fluctuations in the total area under crop, in which seasonal conditions are a superior factor, make for considerable variation from year to year in the number of persons permanently engaged in agriculture, and probably offer a major explanation of the movements of the last four years, although a partial recovery of prices has tended to sustain personnel in the face of the smaller area under crop.

Data as to the number of casual and itinerant workers are not obtainable and it is impossible to say to what extent, if at all, the decrease in the number of persons permanently engaged in cultivating the soil is offset by an increase in number of casual employees. Reference to data as to wages paid to casual employees, however, shows that the proportion of rural work performed by casual employees is relatively small and, although there has been a steady increase in the earnings of casual employees in rural industries in the last four years it does not indicate any large degree of substitution of casual for permanent labour. In fact wages paid to casual employees were approximately equal in amount in 1935-36 and 1928-29.

Particulars of the classes and total wages of persons engaged in rural industries are shown in the chapter "Rural Settlement" of this Year Book, and in the section "Rural Industries" of the Statistical Register of New South Wales. Reference to the number of persons recorded at the Census of 1933 as being engaged in agriculture was published in the chapter "Employment" at page 610 of the "Official Year Book," 1933-34.

### FERTILISERS.

In New South Wales superphosphate is the only artificial fertiliser used extensively, the soils in the wheat areas being generally deficient in phosphoric acid. Tests of manure conducted on the farmers' experiment plots indicate that benefits derived from the application of superphosphate to wheat-lands, as a general rule, are most marked in the southern portion of the wheat-belt, viz., the South-western Slopes and the Riverina. The beneficial results gradually diminish throughout the western districts which form the central portion of the wheat-belt, and in the north-western districts the advantage gained by the use of this fertiliser is least. The results may be affected, however, by the fact that in the south fallowing is more common than elsewhere.

The average quantity of superphosphate used on crops fertilised with this manure only in 1935-36 was 59 lb. per acre. The number of farms on which superphosphate was used on crops in 1935-36 was 22,292 compared with 19,901 in 1934-35.

The following table shows the area of land and the quantity of manure used on crops during the year 1935-36:—

Division.	Area under Crop.	Total Area of Crops Manured.	Manures Used.	
			Natural.	Artificial.
	acres.	acres.	loads.	cwt.
Coastal ... ..	336,549	141,867	180,663	369,534
Tableland ... ..	516,083	193,651	13,228	154,472
Western Slopes ... ..	2,866,787	1,746,291	6,757	840,466
Central Plains ... ..	545,966	255,349	240	92,919
Riverina ... ..	1,446,218	1,244,684	7,928	659,049
Western ... ..	18,712	5,996	1,344	18,279
Whole State, 1935-36 ...	5,730,315	3,587,838	210,160	2,134,719

The greater part of the natural manures is used in the metropolitan division. The total area of crops treated with natural manures was relatively small, being only 30,326 acres, inclusive of the area on which both natural and artificial manures were used.

The quantities of the principal kinds of artificial fertilisers used in 1935-36 were 1,842,340 cwt. of superphosphate and 164,748 cwt. of bone-dust, in manuring 3,493,272 acres and 25,899 acres respectively.

The application of manures to agricultural lands is practised most extensively in the southern districts. In the relatively inextensive agricultural areas in coastal districts a little more than 42 per cent. of the area sown was manured in 1935-36. Ignoring the duplication of area in cases where the same land was manured more than once in the year for different crops, the proportions in respective divisions range from 23 per cent. on the North Coast to over 60 per cent. on the South Coast. A summary in respect of the use of artificial manures in the northern, central, and southern sections of the hinterland (excluding the Western Division) is provided below. These are mainly wheat-growing districts:—

Sections of the Tablelands, Slopes, and Plains.*	Total area under crop.	Area treated with artificial fertiliser.	Artificial fertiliser used.	Proportion of area fertilised to area under crop.	Average amount of of fertiliser used per acre.
1934-35—	acres.	acres.	cwt.	per cent.	cwt.
Northern ...	688,795	6,445	7,829	0·96	1·18
Central ...	1,757,635	823,208	377,595	46·83	0·45
Southern ...	2,894,166	2,409,323	1,196,241	83·25	0·49
1935-36—					
Northern ...	728,491	11,761	16,737	1·61	1·42
Central ...	1,789,190	955,325	450,105	53·39	0·47
Southern ...	2,857,373	2,465,390	1,280,064	86·28	0·52

\* See map in frontispiece of volume.

The following table shows the total area cultivated, the total area manured, and the nature of the manures employed, in various years:—

Season.	Total Area under Crop.	Total Area of Crops Manured.	Manures Used—		Proportion of Area Manured to Area under Crop.
			Natural.	Artificial.	
	acres.	acres.	loads.	cwt.	per cent.
1907-08	2,570,137	423,678	144,021	267,120	16·48
1913-14	4,568,841	2,226,742	166,753	1,010,596	48·74
1915-16	5,794,835	2,753,431	177,788	1,132,446	47·52
1920-21	4,464,342	1,998,429	160,361	998,191	44·76
1925-26	4,541,423	2,635,483	268,930	1,709,557	58·03
1929-30	5,499,408	3,896,692	130,009	2,523,469	71·51
1930-31	6,809,510	4,550,794	142,416	2,631,441	66·83
1931-32	5,107,049	2,267,004	153,777	1,382,303	44·39
1932-33	6,330,370	3,238,716	185,710	1,752,136	51·16
1933-34	6,281,477	3,301,538	175,810	1,900,955	52·56
1934-35	5,684,558	3,367,725	193,992	1,908,810	59·24
1935-36	5,730,315	3,587,838	210,160	2,134,719	62·61

The quantity of superphosphate used on the areas sown with wheat was 1,326,832 cwt. in 1932-33, 1,432,904 in 1933-34, 1,343,959 in 1934-35, and 1,360,665 in 1935-36.

For years prior to 1930-31 the figures in the table do not indicate the exact ratio between the area under crop in any season and the area manured to produce that season's harvests. For some crops the soil is prepared and, the crop is harvested during the period from 1st July to 30th June, which until 1930-31 was taken as the season, in compiling agricultural statistics.

But for other products, *e.g.*, wheat, the most extensive crop—the land under crop in any season was manured between January and June of the preceding period. Nevertheless the table supplies convincing evidence that the practice of manuring the soil was increasing steadily up to 1930-31. In the following year, however, there was a sharp decline in the acreage manured, due principally to the adverse economic conditions ruling in the industry, but the acreage was considerably increased in 1932-33 and has since expanded steadily.

Information regarding the use of artificial manures on pastures for each year since 1927-28 is shown in the chapter "Pastoral Industry" at page 596. In 1935-36 an aggregate area of 351,209 acres on 3,426 holdings was treated with 334,724 cwt. of fertiliser.

Under the Financial Relief Act, 1932, the Commonwealth Government, with the object of enabling primary producers (other than growers of wheat for grain) to continue the use of fertilisers notwithstanding low prices for their products, provided for payment of a subsidy of 15s. per ton in respect of fertiliser used in lots of one ton or more during 1932-33. Assistance of a similar nature has been provided by the Commonwealth Government in each year since 1934-35 with a rate of subsidy of 15s. per ton for fertiliser used for the production of primary produce other than wheat in the years 1934-35 and 1935-36, and of 10s. per ton for the year 1936-37, taking into account quantities of not less than half ton lots. The principal uses to which fertiliser has been applied in these cases are as top-dressing, cultivation of oats, and manuring of fruit trees, vegetables and sugar-cane. The sums received by farmers in New South Wales under these provisions were £19,870 in 1932-33, about £32,970 in 1934-35 and about £45,000 in 1935-36.

The sale of artificial manures was regulated by the Fertilisers Act of 1904, until repealed by the Fertilisers Act, 1934, under provisions of which the vendor is required to sell under a registered brand or name, and furnish to the purchaser a warranted statement as to their nature and chemical composition. Provision is also made for inspection and analysis of fertilisers, summary proceedings against offenders, and publication of an annual list of fertilisers showing the prices asked for the same, the average unit value of constituents of commercial value and the several brands registered in respect of the fertilisers.

#### SHARE-FARMING.

The system of share-farming was introduced toward the end of the last century and has been an important factor in rural development in New South Wales. Under the system the owner provides suitable land and sometimes seed and fertiliser, and the farmer generally provides the necessary plant and labour. The contract usually is that the land be operated for a specified purpose and a fixed time. Various arrangements are made for sharing the product. Sometimes the parties to the agreement take equal shares of the produce up to a specified yield, and any excess goes to the farmer as a bonus. In other cases the owner takes one-third and the farmer two-thirds of the total product.

The following table shows particulars regarding the areas used for cultivation or dairying on shares during 1920-21 and each of the last twelve years:—

Season.	Holdings used for Share Farming.	Share-farmers.	Area Farmed on Shares		
			Cultivation	Dairying.	Total.
	No.	No.	acres.	acres.	acres.
1920-21	1,668	2,761	614,351	121,976	736,327
1924-25	2,510	3,828	695,092	234,736	929,828
1925-26	2,493	3,687	645,395	226,362	871,757
1926-27	2,919	4,043	706,025	274,030	980,055
1927-28	3,227	4,457	845,397	303,274	1,148,671
1928-29	3,281	4,402	840,972	343,942	1,184,914
1929-30	3,458	4,672	898,863	356,147	1,255,010
1930-31	3,720	5,033	1,018,591	396,863	1,415,454
1931-32	4,033	5,603	863,083	464,093	1,327,176
1932-33	6,606	9,119	1,599,191	554,151	2,153,342
1933-34	5,916	8,091	1,377,323	614,600	1,991,923
1934-35	5,877	7,765	1,179,832	661,543	1,841,375
1935-36	6,331	8,401	1,169,931	736,062	1,905,993

Whilst the foregoing table reveals a very material expansion in the last decade in the area of land worked on the share-farming principle the extension of this method in recent years is more strikingly illustrated by noting the growth in the number of holdings used wholly or in part for share-farming. Thus in 1935-36 there were 6,331 such holdings compared with 3,281 in 1928-29; of these 3,822 were used exclusively for agriculture in 1935-36, but only 2,301 in 1928-29, while the number used for dairying (only) decreased from 273 to 251. Holdings with share-farmers engaged in agriculture and dairying in combination (including dairy farms on which only fodder crops for dairy cattle were grown) increased in number from 707 to 2,258.

Practically the whole of the area cultivated on the share-system is devoted to wheat-growing. The system was well developed in 1915-16, when the area cultivated under it exceeded one-fifth of the total area under crop in the State. Up to 1919-20 the returns from wheat-growing were small on account of droughts and market difficulties, and share-farming diminished more rapidly than other systems of cultivation. Subsequent experience was largely affected by seasonal conditions, but there was a substantial increase in share-farming between 1925 and 1933. In the latter year the area farmed in this manner approximated one-fourth of the total area under crop in the State and though subsequently there was a decline in the area share-farmed, the proportion of total area under crop worked in that way in 1935-36 approached one-fifth.

Of the areas cultivated in 1935-36 on the share-system 612,352 acres were in the Western Slopes Division and 437,012 acres were in the Riverina.

## DATES OF PLANTING AND HARVESTING.

The usual dates of planting and harvesting the principal crops of the State in the main districts in which they are sown are as follow:—

Crop.	Most Usual Months of—	
	Planting.	Harvesting.
Wheat ... ..	May-June ... ..	November-December.
Maize ... ..	September-December ...	January-August.
Oats ... ..	May ... ..	December.
Barley ... ..	May ... ..	December.
Rice ... ..	October ... ..	May.
Potatoes—early ...	July-August ... ..	November-December.
„ late ... ..	November ... ..	July.
Sugar-cane ... ..	September ... ..	July-December.
Tobacco ... ..	November-December ...	March-April.
Broom Millet ... ..	September-October ...	January-February.

It should be noted that the foregoing statement shows only the most usual dates and that both planting and harvesting occur before and after the periods specified, divergences being due to the variety of seed planted, the geographical position of the district, and variations in seasonal conditions.

## INDIVIDUAL CROPS.

## WHEAT.

Wheat is the staple agricultural product of New South Wales, and its cultivation provides a means of livelihood for a large section of the population. It is the principal activity on probably one-eighth of the rural holdings of the State, and three-quarters of the average area under crop is devoted to wheat. The farm value of wheat-crops (other than those used as green fodder) in 1935-36 was £8,764,350, including £8,137,000 from grain and £627,350 from wheaten hay. These figures were inclusive of a bounty paid to growers by the Commonwealth Government amounting to £564,368.

The mild climate of New South Wales makes it possible to work the soil on scientific lines throughout the year, and admits of the utilisation of paddocks for pastoral purposes after the crop has been harvested. The time of sowing varies according to district and seasonal conditions, but is seldom earlier than March or later than August. Harvesting generally begins in November and may extend until February.

*The Wheat Belt.*

A description of the nature and extent of the wheat belt of New South Wales was published on pages 573 and 574 of the Year Book for 1928-29.

The extension of the limits of wheat-growing in New South Wales formed the subject of special reports by the Government Statistician in 1905, 1913, and 1923.

*Development of Wheat Growing.*

Wheat growing as an industry in New South Wales has progressed steadily since 1890. From the latest figures available it is estimated that an area of 29,736,000 acres is suitable for cultivation, and of this area 3,851,373 acres, or nearly one-seventh was actually sown with wheat for grain in 1935-36.

The following statement shows the area under wheat for grain and for hay, together with the total production, average yield per acre, and quantity exported since 1897-98, the first season in which there was a surplus of wheat for export:—

Season.	Area under Wheat.				Yield.		Average yield per acre.		Wheat and Flour in cal-endar year following harvest.
	For Grain.	For Hay.	Fed-off.*	Total.	Grain.	Hay.	Grain.	Hay.	
	acres.	acres.	acres	acres.	thousand bushels.	thousand tons.	bushels.	tons.	thousand bushels. †
1897-98	993,350	213,720	†	1,207,070	10,560	182	10·6	·85	582
1898-99	1,319,503	312,451	†	1,631,954	9,276	177	7·0	·57	437
1899-00	1,426,166	414,813	†	1,840,979	13,604	341	9·5	·32	805
1900-01	1,530,609	332,143	†	1,862,752	16,174	348	10·6	1·05	4,788
1901-02	1,392,070	312,558	†	1,704,628	14,809	287	10·6	·92	2,914
1902-03	1,279,760	320,588	†	1,600,348	1,585	76	1·2	·24	154
1903-04	1,561,111	286,702	†	1,847,813	27,334	452	17·5	1·58	9,772
1904-05	1,775,955	284,367	†	2,060,322	16,464	207	9·3	·73	5,661
1905-06	1,939,447	313,582	†	2,253,029	20,737	305	10·7	·97	5,338
1906-07	1,866,253	316,945	16,744	2,199,942	21,818	403	11·7	1·27	6,246
1907-08	1,390,171	365,925	129,813	1,885,909	9,156	198	6·6	·54	962
1908-09	1,394,056	490,828	104,202	1,989,086	15,483	427	11·1	·87	4,866
1909-10	1,960,180	380,784	5,825	2,376,789	28,532	566	14·3	1·49	12,111
1910-11	2,128,826	422,972	61,458	2,613,256	27,914	468	13·1	1·11	14,423
1911-12	2,380,710	440,243	80,731	2,901,684	25,088	423	10·5	·96	10,172
1912-13	2,231,514	704,221	31,557	2,967,292	32,487	780	14·6	1·11	17,116
1913-14	3,205,397	534,226	23,393	3,763,016	38,020	683	11·9	1·10	20,038
1914-15	2,758,024	569,431	815,561	4,143,016	12,831	355	4·7	·62	785
1915-16	4,188,865	879,678	53,702	5,122,245	66,765	1,212	15·9	1·38	23,514
1916-17	3,806,604	633,605	58,101	4,498,310	36,598	814	9·6	1·28	21,262
1917-18	3,329,371	435,180	63,855	3,828,486	37,712	485	11·3	1·11	12,650
1918-19	2,409,669	613,544	204,161	3,227,374	18,325	517	7·6	·84	19,694
1919-20	1,474,174	716,770	877,596	3,068,540	4,388	355	9·0	·49	427
1920-21	3,127,377	520,555	15,420	3,663,352	55,625	822	17·8	1·58	41,746
1921-22	3,194,040	467,363	24,795	3,687,047	42,767	675	13·4	1·23	21,798
1922-23	2,942,857	593,184	350,968	3,892,009	28,668	649	9·7	1·09	8,904
1923-24	2,945,335	695,622	283,305	3,924,262	33,176	703	11·3	1·01	11,976
1924-25	3,550,078	338,470	21,647	3,960,204	69,767	537	16·8	1·38	38,741
1925-26	2,925,012	449,803	286,552	3,661,367	35,806	444	11·6	·99	16,951
1926-27	3,352,736	311,213	36,160	3,700,109	47,541	394	14·2	1·27	18,697
1927-28	3,020,950	309,960	622,385	4,022,295	27,042	343	8·9	·93	15,516
1928-29	4,090,083	375,270	19,006	4,484,358	49,257	390	12·0	1·04	21,063
1929-30	3,974,064	331,071	48,014	4,404,049	34,407	311	8·7	·82	14,621
1930-31	5,134,960	620,993	17,992	5,673,945	65,877	678	12·8	1·30	44,122
1931-32	3,632,945	292,234	20,008	3,995,187	54,966	376	14·9	1·29	38,769
1932-33	4,803,943	290,556	24,535	5,119,034	78,870	396	16·4	1·56	40,779
1933-34	4,584,092	324,129	30,561	4,988,782	57,057	385	12·4	1·19	21,503
1934-35	3,892,768	271,272	26,017	4,190,057	48,678	342	12·5	1·26	30,471
1935-36	3,851,373	224,632	49,661	4,125,656	48,822	267	12·7	1·19	25,546

\* Includes area sown for green food. In 1927-28 and previous years, all areas fed-off were included in this column. In 1928-29 and subsequent years, areas with an estimated fed-off value of less than the farm value of 5 bushels per acre were treated as having failed entirely, and the acreage was allocated to grain or hay according to the purpose for which sown.

† Information not available.

‡ Flour has been expressed at its equivalent in wheat.

Broadly speaking, yields below 5 bushels per acre can be regarded as failures, between 5 and 10 bushels as moderate, 10 to 15 bushels as good, and over 15 bushels as very good. Classified on this basis, it is found that in the 39 years under review 3 crops have been failures, 9 were moderate, 22 were good, and 5 were very good. The average annual area harvested for hay has decreased heavily during the period from 625,560 acres in the five years ended 1916 and 519,890 acres in the five years ended 1926 to 280,565 acres in the last quinquennium. In 1928-29, 1929-30 and 1930-31 areas with a fed-off value of less than 15s. per acre were classified as failed, and included with the areas sown for hay or grain. The value adopted in this connection was 7s. 6d. per acre in 1931-32 and 10s. per acre since 1932-33.

The fluctuations in the development of wheat-growing since 1915 were discussed on pages 575 and 576 of the Year Book for 1928-29 and page 57 of the 1932-33 issue. Excluding the war years, and with variations, doubtless attributable to weather conditions preceding and at the time of sowing, the area sown for grain tended to expand in comparison with pre-war

years up till 1928-29. In 1930, in response to a national appeal, and despite unfavourable seeding conditions in many districts, the area sown with wheat for grain exceeded the previous record (1915-16) by over half a million acres. Excessive rainfall from March to June, 1931, prevented many farmers from sowing in 1931-32, but the auspicious opening of the season in 1932-33, and probably, the urge to offset very low prices by increased production, led to cropping of an area for grain exceeded previously only in 1930-31, from which a record harvest was garnered. The following year, although rainfall in the sowing period was fair, a smaller area was sown. The autumn of 1934 was a dry one, and there was again a material decline in area, and although conditions were somewhat more propitious for sowing in 1935, a further decrease in area was recorded. It would seem that the progressively smaller area sown in each of the seasons 1933-34 to 1935-36 may be ascribed largely to the wheat-growers' reaction to the long period of very poor prices. The sowing period of 1936 was somewhat difficult, but a slightly larger area was sown, apparently in response to a material improvement in wheat prices.

#### *Rainfall Index for Wheat Districts.*

The following summary provides a monthly index of rainfall in the wheat districts of the State since 1921. The index is derived from the ratios of the average rainfall of each eleven individual districts to the normal rainfall for the same districts weighted in accordance with the average area sown with wheat in each district. The normal rainfall for each month is represented by 100, and the index shows, therefore, the percentage of actual to normal rainfall in each month:—

Month.	Rainfall Index—New South Wales Wheat Districts. (Percentage of Normal).												
	1921.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
January	83	194	59	111	197	20	44	69	13	143	169	117	184
February	96	130	28	22	411	148	36	37	99	7	310	104	207
March ...	129	58	256	38	162	99	48	270	180	53	35	24	131
April ...	159	16	267	71	137	141	67	204	181	86	117	199	67
May ...	178	205	163	60	54	33	82	312	43	74	4	28	48
June ...	142	128	75	39	76	36	111	227	72	65	72	33	107
July ...	102	89	79	53	119	27	103	90	87	127	163	115	203
August ...	91	80	97	69	27	111	124	50	129	50	137	68	96
September	124	42	101	63	100	95	43	91	141	152	71	114	53
October	95	46	61	153	88	79	234	46	57	102	255	116	52
November	53	129	15	135	32	102	95	123	112	190	218	27	15
December	168	36	136	57	19	118	248	97	59	176	66	68	215
Average yield of wheat per acre (bushels)	13.4	11.6	14.2	8.9	12.0	8.7	12.8	14.9	16.4	12.4	12.5	12.7	13.8*

\* Estimated.

The significant months as regards the effect of rainfall on wheat yields are from April to October—more especially April, May, and September. The wheat districts extend over practically the whole length of the hinterland, and seasonal conditions vary widely as between districts. These circumstances, together with the incidence of fallowing and fertilising, temperatures and winds, play a large part in modifying the effects of rainfall on yields.

While the foregoing summary is useful for general reference as to the relationship of wheat yields to seasonal conditions, a more discriminating analysis is necessary. In the following table the rainfall index for the northern, central, and southern sections of the wheat belt is shown in comparison with the average yields per acre from fallowed and stubble lands in the seasons 1935-36 and 1936-37:—

Month.	Rainfall Index 1935—Wheat Districts Normal for each month=100.				Rainfall Index 1936—Wheat Districts Normal for each month=100.			
	North- ern.	Central.	South- ern.	Total.	North- ern.	Central.	South- ern.	Total.
January ... ..	165	114	108	117	92	152	217	184
February ... ..	55	93	118	104	117	262	203	207
March ... ..	12	13	32	24	130	173	113	131
April ... ..	62	131	256	199	54	36	84	67
May ... ..	32	50	18	28	84	62	34	48
June ... ..	19	29	38	33	39	72	136	107
July ... ..	107	89	128	115	179	188	214	203
August ... ..	53	62	74	68	118	101	90	96
September ... ..	148	99	113	114	110	52	41	53
October ... ..	110	122	115	116	18	50	61	52
November ... ..	23	43	20	27	10	7	19	15
December ... ..	53	66	72	68	131	189	243	215
Average yield of wheat per acre—	1935-36.				1936-37.*			
Fallowed land bus..	13.2	13.1	17.0	15.8	17.0	15.0	15.7	15.5
Stubble land bus....	9.3	7.2	9.9	8.5	12.9	11.4	11.6	11.8

\* Estimated.

### Wheat Districts.

The statistical divisions of New South Wales are shown on the map as the frontispiece of the Year Book.

The principal wheat-producing divisions of the State, arranged in order of importance, are the Riverina, the south-western slopes, the central-western slopes, the north-western slopes, the central plain, the central tableland, and the northern plains. A diagrammatic illustration of the relative areas of the wheat lands in the respective statistical divisions of the State in quinquennial periods ended 1911, 1921 and 1931 appears as an inset to the graph published at page 520 of this edition. The average area harvested for grain and the average yield in each division for the period of ten years 1926-27 to 1935-1936 are shown in the following summary:—

District.	Northern.		Central.		Southern.		Total.	
	acres.	bus.	acres.	bus.	acres.	bus.	acres.	bus.
Coastal ... ..	9,160	127,942	183,688	2,600,431	3,558	50,161	1,797	23,016
Tableland ... ..	342,360	4,920,796	841,732	10,095,866	1,027,053	14,105,082	196,406	2,784,534
Slopes ... ..	138,393	1,761,397	272,893	2,341,767	1,210,416	15,189,539	2,211,150	29,121,744
Plains ... ..							1,621,702	19,289,703
Western Division							8,636	32,703
Total ... ..	489,913	6,810,135	1,298,313	15,038,064	2,241,032	29,347,782	4,039,691	51,251,700

\* Comparable divisions not available.

Although the proportions vary seasonally, on the average approximately 55 per cent. of the area harvested for grain is in the southern districts, 33 per cent. in the central districts, and 12 per cent. in the northern districts. Comparison on this basis has the merit of dividing the wheat belt

into three portions, of which the northern normally receives the greater part of its rainfall in the summer, and the southern in the winter, while the rainfall of the central districts is non-seasonal in character. Differences of soil, geographical features, cultural methods, and other factors play a considerable part in determining the yields of the various divisions.

The following statement shows that wheat is most extensively grown in the southern districts, and that in recent years the best results usually have been secured in the northern areas:—

Divisions,	Area Harvested for Grain.		Yield of Grain.		Yield of Grain per Acre.						
	Average, 1923-27 to 1935-36.	1935-36.	Average, 1926-27 to 1935-36.	1936-37.	Average 1926-27 to 1935-36.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	acres.	acres.	1,000 bus.	1,000 bus.	bus.	bus.	bus.	bus.	bus.	bus.	bus.
Coastal ...	1,797	2,157	23	16	12·8	12·1	15·0	17·9	11·9	14·0	7·1
†Northern ...	489,913	513,312	6,810	5,133	13·9	14·7	16·4	12·9	17·7	14·8	10·0
†Central ...	1,298,313	1,274,661	15,038	12,567	11·6	13·3	14·8	15·2	11·7	11·6	9·9
†Southern ...	2,241,032	2,051,894	29,348	31,103	13·1	12·2	14·7	17·9	11·6	12·7	15·2
Western	8,636	9,349	33	3	3·8	4·0	7·2	6·8	1·8	1·4	0·4
Total....	4,039,691	3,851,373	51,252	48,822	12·6	12·8	14·9	16·4	12·4	12·5	12·7

† Includes Tablelands, Slopes, and Central Plains.

Generally speaking, the use of fertilisers and the practice of fallowing were most extensive in the southern districts, where, until recently, the average yield was usually greatest. This was due in a large part to the more dependable nature of the winter rains. But, as a post-war development, substantial areas with rather uncertain rainfall were brought into cultivation in the western Riverina, and the generally poor results in the new areas have had appreciable effect in reducing the average yield in the southern districts. Although in each season since 1929-30, excepting 1932-33 and 1935-36 the yield per acre in the northern areas was substantially higher than in any other division seasonal conditions contributed to that result in most years. With these considerations taken into account it would appear that the well-established and important sections of the southern district may retain place as the part of the wheat belt in which the cereal is most successfully grown. But notable progress has been made in the northern districts as may be seen in the increase in the average yield from 9·6 bushels per acre in the decennium ended 1923-24 to 13·9 bushels per acre over the ten-year period ended 1935-36.

#### *Average Yield of Wheat.*

Viewed over a long period of years, the average yield of wheat in New South Wales is subject to marked fluctuations by reason of the widely divergent nature of the seasons, but reference to the table on page 533 will show that these fluctuations have been much less marked since 1920-21 than formerly. The highest yields have usually been recorded in seasons following the worst droughts, and besides giving dramatic proof of the advantages of fallowing have gone far to make immediate compensation for the losses sustained. The lowest yield on record—that of the 1902 season—was only 1·2 bushels per acre. It was followed by a yield of 17·5

bushels per acre; which was surpassed only in 1920-21, when, after the severe drought of 1918-20, a record average of 17.8 bushels per acre was obtained. The lowest average yield in any season since 1919-20 was 8.7 bushels per acre in 1929-30.

The average annual yield has shown definite improvement since the commencement of wheat-growing for export in 1897. The fact that the average is still considerably below that which was obtained prior to this expansion is due probably to the fact that only some of the best wheat lands were tilled prior to the increase in the area sown. In decennial periods the average yields of New South Wales have compared as follows:—

Period.	Average Yield per acre.	Period.	Average Yield per acre.
	bushels.		bushels.
1872-1881	14.71	1912-1921	11.62
1882-1891	13.30	1922-1931	12.02
1892-1901	10.02	1927-1936	12.67
1902-1911	11.04		

In calculating these averages the area which was sown for grain but failed is included, while the area fed off or used for green fodder is excluded.

The yield of wheat in New South Wales is usually rather less per acre than that obtained in some of the large wheat-producing countries. Averages for the five years 1930-31 to 1934-35 are shown below, but an extraordinary succession of unfavourable seasons in Canada and the United States in that period renders the averages shown much below that normally experienced in those countries.

Country.	Average Yield per acre.	Country.	Average Yield per acre.
	bushels		bushels.
Canada ... ..	13.6	Australia ... ..	12.2
United States ...	13.6	New South Wales ...	13.8
Argentina ... ..	13.8	Russia (U.S.S.R.) ...	10.8

Although the yield in New South Wales is largely influenced by the nature of the seasons, it is apparent that, as scientific methods of cultivation are becoming more widely adopted and land is properly fallowed, tilled, and manured, the average yield per acre is increasing. Another favourable factor exists in the improvement of wheat types by plant-breeding. However, it is anticipated that the warm climate and the prevalence of hot winds during the ripening period will always militate against a high average yield being obtained in New South Wales, such as is obtained in more humid countries.

#### *Fallowing and the Wheat Yield.*

Since 1923-24 statistics have been collected of the yield of grain from the areas of new land, fallowed land, and unfallowed land sown with wheat. It was intended that land should not be classed as fallow unless it had been cultivated by ploughing during the year preceding the sowing, but it is doubtful whether the collection has been made on this basis in all cases. Summer fallow is practised to some extent.

The following table provides a comparison of the yields obtained from the various classes of land in 1935-36 in each of the divisions described on page 535:—

Division.	Area,†			Total Yield.			Average Yield per Acre.		
	New Land.	Fallowed Land.	Stubble Land.	New Land.	Fallowed Land.	Stubble Land.	New Land.	Fallowed Land.	Stubble Land.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
Coastal ...	173	130	1,845	1,872	672	12,864	10·8	4·8	7·0
Northern* ...	44,164	96,322	369,826	383,691	1,314,252	3,435,372	8·7	13·2	9·3
Central* ...	44,337	568,690	661,634	343,470	7,435,557	4,787,922	7·8	13·1	7·2
Southern* ...	38,061	1,527,177	486,666	363,576	25,940,274	4,799,118	9·6	17·0	9·9
Western ...	524	3,678	5,147	... F	2,589	777	...	0·7	0·2
Total ...	127,249	2,199,006	1,525,118	1,092,603	34,693,344	13,036,053	8·6	15·8	8·5

\* Includes Tablelands, Slopes, and Central Plains.

† Including are s which failed. F. Failure.

The average yields on fallowed land were far in excess of those from other land throughout the wheat belt. There are, however, other factors such as rainfall, cultural methods, and soil, which necessarily play an important part in determining the results. The climatic conditions prevailing in the various wheat districts and the methods adopted by farmers differ in a marked degree, consequently the results shown above do not represent fully the benefits which accrue from fallowing. Still, it is apparent that even with present methods of fallow the improvement in the wheat yield has been appreciable.

The average yields per acre from fallowed and unfallowed lands respectively in the northern, central, and southern districts of the State in each year for which records have been obtained are as follows:—

Year.	Northern Districts.*		Central Districts.*		Southern Districts.*		Whole State.	
	Fallowed.	Stubble.	Fallowed.	Stubble.	Fallowed.	Stubble.	Fallowed.	Stubble.
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1923-24 ...	8·3	6·8	10·4	8·5	15·3	12·2	14·1	9·6
1924-25 ...	19·4	16·1	19·1	14·7	19·9	13·9	19·7	14·8
1925-26 ...	9·3	7·5	15·3	10·7	13·2	10·1	13·5	10·0
1926-27 ...	16·1	14·3	16·4	12·7	15·2	12·3	16·0	13·0
1927-28 ...	5·8	3·6	9·0	5·7	11·7	7·5	11·2	5·9
1928-29 ...	16·7	14·3	14·5	9·7	13·7	9·2	13·9	10·6
1929-30 ...	19·2	15·0	7·9	4·2	11·7	6·5	10·8	7·3
1930-31 ...	16·3	14·7	15·8	12·8	15·2	9·9	15·4	11·8
1931-32 ...	20·1	16·4	18·6	13·5	16·7	11·6	17·1	13·4
1932-33 ...	16·6	12·8	19·3	13·7	20·6	15·1	20·2	14·1
1933-34 ...	21·4	17·0	14·0	10·3	14·0	7·8	14·3	10·7
1934-35 ...	18·0	13·3	13·1	10·2	13·8	9·3	13·8	10·7
1935-36 ...	13·2	9·3	13·1	7·2	17·0	9·9	15·8	8·5

\* Includes Tablelands, Slopes, and Plains.

The following statement shows the approximate areas of new land, fallowed land, and stubble land, sown with wheat harvested for grain, including that which failed entirely in New South Wales during each of the past twelve seasons:—

Season.	New Land.	Fallowed Land.	Remainder, Stubble Land.	Total.*	Proportion Fallowed to Total Area.
	acres.	acres.	acres.	acres.	per cent.
1924-25	149,894	1,583,047	1,780,069	3,513,010	45.1
1925-26	81,243	1,464,686	1,307,334	2,853,263	51.3
1926-27	123,730	1,746,822	1,465,903	3,336,455	52.4
1927-28	115,971	1,771,208	1,119,586	3,006,765	58.9
1928-29	192,865	2,010,751	1,872,933	4,076,554	49.3
1929-30	190,715	1,638,683	2,072,380	3,901,778	42.0
1930-31	297,618	1,708,104	3,117,413	5,123,135	33.3
1931-32	123,661	1,473,678	2,062,609	3,659,948	40.3
1932-33	175,232	1,852,243	2,776,468	4,803,943	38.6
1933-34	180,088	2,152,276	2,251,728	4,584,092	46.9
1934-35	133,018	2,242,764	1,516,986	3,892,768	57.6
1925-36	127,249	2,199,006	1,525,118	3,851,373	57.1

\* Approximate.

The ratio of fallowed land to the total sown for grain in 1935-36 was 19.3 per cent. in the northern districts, 44.6 per cent. in the central districts and 74.4 per cent. in the southern areas.

On the average about half the total area cropped for grain is fallowed land, but in response to a "grow more wheat" campaign in 1930 a large proportion of stubble land was cropped again in lieu of being fallowed. This factor, together with the exceptionally heavy rains in 1931, reduced the sowings of 1931-32. In 1932-33 a substantially increased acreage was sown under all three headings, and in 1933-34 a normal proportion of the total area comprised fallowed land. More fallowed land was used in 1934-35 than in any previous season when the proportion sown on fallows was 57.6 per cent., and with one exception (1927-28) the highest on record. That the high proportion was not merely incidental is indicated by the fact that 57.1 per cent. of the area sown in 1935-36 was fallowed land.

#### *Size of the Wheat Farms.*

If it be considered that, in normal seasons, an area of less than 250 acres devoted to wheat will not provide subsistence for a farmer and his family, it is apparent, in view of the small average area devoted to wheat, that wheat-growing in many cases must be conducted in conjunction with other pursuits, and that many wheat-growers derive portion of their living

from other sources. Some idea of the extent to which wheat farming is carried on in conjunction with sheep-grazing and dairying is given at pages 543-546 of this Year Book, where special compilations of wheat statistics for the seasons 1932-33 and 1935-36 are reviewed.

The following table illustrates the recent development of wheat-growing in respect of number and average size of areas sown:—

Year.	Wheat sown for Grain, Hay, and Green Food.			Holdings on which wheat was sown only for hay or for green food.	Wheat sown for Grain.		
	Holdings.	Total Area sown with Wheat.	Average Area per Holding devoted to Wheat.		No. of Holdings	Areas sown for grain.†	Average area per holding.†
	No.	acres.	acres.	No.	No.	acres.	acres.
1900-01	20,149	1,862,752	92	*	*	*	*
1905-06	19,049	2,253,029	118	*	*	*	*
1915-16	22,453	5,122,245	224	*	*	*	*
1920-21	17,790	3,663,352	206	2,132	15,658	3,127,377	200
1925-26	17,074	3,661,367	214	2,797	14,277	2,925,012	205
1926-27	17,135	3,700,100	216	1,204	15,931	3,352,736	210
1927-28	16,817	4,022,295	239	2,710	14,107	3,029,950	215
1928-29	17,134	4,484,958	262	1,128‡	16,006	4,090,083	256
1929-30	16,382	4,404,049	269	1,177‡	15,205	3,974,064	261
1930-31	18,171	5,673,945	312	1,247‡	16,924	5,134,960	303
1931-32	16,875	3,995,187	237	945‡	15,930	3,682,945	231
1932-33	19,029	5,119,034	269	1,068‡	17,961	4,803,943	268
1933-34	18,745	4,938,782	263	1,409‡	17,336	4,584,092	268
1934-35	17,583	4,190,057	238	1,462‡	16,121	3,892,768	241
1935-36	17,220	4,125,656	240	1,297‡	15,923	3,851,373	242

\* Not available.

† Excluding area cropped for hay.

‡ Areas with fed-off value less than 15s. per acre in 1928-1931, and less than 7s. 6d. per acre in 1932, and less than 10s. per acre since 1933 have been classified as failed entirely and included in the second column of the table.

The expansion in area 1928 to 1930 was due mainly to an increase in average areas sown, but also in large measure to an increase in the number of growers in 1930-31. Depressive market conditions and the unusually small area of fallowed land available were responsible for a severe contraction in acreage, and the number of growers in 1931-32. The anticipation of a Government bonus, and also the persistently low prices received for wool probably induced many additional farmers to grow wheat in 1932-33, with the result that there was a substantial increase in both acreage and the number of growers, from which there was a moderate decline in 1933-34, but which was more emphasised in 1934-35 and 1935-36.

Consideration of the above table in conjunction with statistics of average yield suggests that there is a considerable number of growers who sow wheat and crop it for grain, hay or green food, according to seasonal conditions, though the use of wheat for fodder crops has also proved less popular in the last eight years.

The following table provides a summary of the areas of holdings on which wheat was grown for grain in the seasons 1934-35 and 1935-36 arranged in groups according to the area cropped for grain:—

Area cropped for Grain.	1934-35.				1935-36.			
	Hold-ings.	Area cropped for grain.	Production of grain.	Average yield per acre.	Hold-ings.	Area cropped for grain.	Production of grain.	Average yield per acre.
acres.	No.	acres.	bushels.	bushels.	No.	acres.	bushels.	bushels.
1-49	2,125	44,329	557,499	12.6	2,046	43,462	555,099	12.8
50-299	9,146	1,561,495	19,956,006	12.8	8,966	1,518,574	21,711,459	14.3
300-499	3,439	1,265,713	15,283,902	12.1	3,509	1,285,105	15,168,444	11.8
500-999	1,261	799,885	9,923,751	12.4	1,250	788,002	8,679,858	11.0
4,000-1,999	133	172,123	2,246,931	13.1	142	181,170	2,057,514	11.4
2,000-and over.	17	49,223	709,911	14.4	10	35,060	649,626	18.5
Total	16,121	3,892,768	48,678,000	12.5	15,923	3,851,373	48,822,000	12.7

In this table wheat-farms are divided somewhat arbitrarily into six classes, graded according to the size of the area cultivated for grain. Those where less than 50 acres are cultivated for grain may be considered to be held by growers earning their livelihood principally in other directions. In 1935-36 these numbered 2,046, or 12.9 per cent. of the total. Where the areas cultivated range from 50 acres to 299 acres growers may be considered to draw their subsistence from wheat-growing in a degree ranging from partial to complete dependence—these numbered 8,966, or 56.3 per cent. of the total. Where the area cultivated exceeds 300 acres it may be considered generally that hired labour is employed in connection with the whole of the operations, or that more than one grower is involved. Areas of this kind numbered 4,911, and represented 30.8 per cent. of the total.

In all, areas of less than 30 acres in extent were sown with wheat for grain on 1,362 farms. The total number of areas under 100 acres in extent sown with wheat for grain was 3,608; from 100 to 199 acres, 3,851; from 200 to 299 acres, 3,553; from 300 to 399 acres, 2,335; and from 400 to 499 acres, 1,174; the number in successive crops of 100 diminished rapidly thereafter. In 1935-36 there were 10 wheat crops of 2,000 acres and over in extent. A number of large crops, however, are farmed on the shares system, and in some cases more than one share-farmer is engaged.

The disparities between the average yields in area series are generally not very pronounced, and are affected by the chance factors of rainfall and location. The most productive groups of areas in the various years were as follow:—In 1935-36, 1934-35, 1932-33, 1927-28 and 1925-26, areas over 2,000 acres in extent; in 1931-32 areas from 1,000 to 1,999 acres; in 1926-27, areas from 300 to 999 acres in extent, and 1930-31, 1928-29, 1924-25 and 1923-24, areas from 50 to 299 acres; 1929-30 and 1922-23, areas under 50 acres.

A table showing the number, area and production from wheat crops in area series in each division of the State is published in the section "Agriculture" of the Statistical Register of New South Wales. This shows that

the 10 crops of 2,000 acres and over in extent in 1935-36 were distributed divisionally as follows:—In Riverina 5, South-western Slopes 2, Central-western Slopes 2, North-central Plain 1.

### Varieties of Wheat Grown.

Wheat-growing in this State has been attended with a great deal of experimentation, as the many varieties named in the following table will indicate. Most of these experiments in wheat breeding have been conducted by the Department of Agriculture, and the benefit conferred on the industry in general has been very appreciable. In 1936-37 more than half the total area under wheat was sown with one of the three leading varieties, Ford, Nabawa and Dundee.

Varieties	Season.			Varieties	Season.		
	1929-30.	1933-34.	1936-37.		1929-30.	1933-34.	1936-37.
	acres.	acres.	acres.		acres.	acres.	acres.
Aussie ... ..	30,214	31,317	23,640	Gullen ... ..	1,235	4,557	4,773
Baringa ... ..	...	38,400	287,474	Hard Federation...	122,946	20,631	10,126
Bena ... ..	195,126	71,659	47,168	Marshall's No. 3 ...	141,123	74,585	57,836
Bencubbin ... ..	...	...	102,977	Nabawa ... ..	203,217	1,135,719	879,688
Bobin ... ..	4,678	449,313	173,651	Penny ... ..	126,029	81,544	32,331
Canberra ... ..	236,399	24,947	16,099	Pusa No. 4. ... ..	*	42,393	67,712
Cantrmba ... ..	4,440	16,465	21,114	Quality ... ..	...	...	3,472
Clarendon ... ..	12,189	8,612	4,265	Rajuh ... ..	7,171	21,705	11,308
Cleveland ... ..	31,608	7,202	3,784	Ranee ... ..	49,291	165,647	173,214
Currawa ... ..	61,211	28,010	16,733	Riverina ... ..	47,543	30,028	17,667
Duchess ... ..	...	4,987	6,474	Sepoy ... ..	...	22,377	11,123
Dundee ... ..	...	111,679	524,237	Sword ... ..	...	...	1,637
Durl ... ..	5,791	12,137	10,367	Totadgin ... ..	...	...	2,235
Federation ... ..	679,043	54,672	14,977	Turvey ... ..	281,556	62,927	37,644
Florence ... ..	13,609	20,390	22,209	Union ... ..	108,944	37,285	12,045
Ford ... ..	3,095	513,399	890,959	Waratah ... ..	817,138	360,783	280,410
Free Gallipoli ...	95,777	202,640	56,024	Yandilla King ...	431,512	200,790	103,267
Garra ... ..	...	...	6,672	Other Varieties ...	564,360	198,632	160,833
Geeralying ... ..	...	28,902	62,599				
Ghurka ... ..	...	20,179	75,692				
Ghuford ... ..	*	...	3,443				
Gresley ... ..	59,755	11,486	8,039				
Gular ... ..	...	...	11,484				
				Total ... ..	4,335,000	4,125,598	4,257,492

\* Information not collected.

Substantial improvement has been effected in recent years in the yielding capacity, disease resistance and milling and baking quality of the wheat grown in New South Wales. There has been considerable displacement of late maturing varieties such as Yandilla King, Penny, Marshall's No. 3, Turvey and Currawa by the newer types of mid-season maturity. Varieties of the latter class represent about 70 per cent. of the total area under wheat, and include Ford, Nabawa, Dundee, Baringa and Bencubbin, which, by virtue of their disease resisting qualities, have to a great extent been used in place of Federation, Free Gallipoli, Union, Nizam and Wandilla, thereby minimising the former considerable loss from the ravages of flag-smut and stem rust. Ford yields heavily, mills well and is adapted for cultivation in all but the most south-western areas of the State. Besides its liberal yield of high quality grain, Nabawa has marked drought resisting qualities and is thus of great utility on the dry areas of the western fringe of the wheat belt. Baking quality of the grain, good yielding capacity and strength of its straw which minimises lodging, are characteristics which have quickly popularised Dundee.

Adoption of these newer varieties has doubtless increased average yields per acre, and resulted in a marked improvement in the baking quality of the grain produced. Extended cultivation of hard wheats has enabled the

separate handling and marketing in bulk of a hard commercial class of definite superiority in baking quality to even the improved f.a.q. wheat.

Of the three chief early maturing varieties, Waratah, Bobin and Rancee, sowings with which now represent about 15 per cent. of the total area under crop, Waratah and Bobin are of relatively poor baking quality and tend to be replaced by the popular mid-season varieties. On the other hand, new varieties of very early maturity, including Pusa No. 4, Florence and Gular, yielding wheat of the highest baking quality produced in New South Wales, are being grown to an increasing extent.

*Wheat Growing in Conjunction with Grazing and Dairying.*

To assist the Royal Commission on the Wheat, Flour and Bread Industries a special compilation of wheat statistics for the season 1932-33 was undertaken by this Bureau. Detailed results were published in the "Statistical Register, 1933-34" and were summarised at pages 65 and 66 of the "Official Year Book, 1932-33." A similar survey in respect of wheat growing in 1935-36 has been made and tables presenting the information in respect of each statistical division appear in the part "Rural Industries and Settlement" of the "Statistical Register, 1935-36."

Excluding the Coastal Divisions, in which wheat-growing is unimportant, there were in New South Wales 15,861 holdings on which wheat for grain was grown in 1935-36, compared with 17,892 such holdings in 1932-33, and the area under wheat declined from 4,802,010 acres to 3,849,216 acres. A comparison according to the size of holdings covering wheat-growing in the seasons 1932-33 and 1935-36 is as follows:—

Size of Holdings Growing Wheat for Grain.	Holdings Growing Wheat (Grain).*		Area Sown with Wheat (Grain).*		Production of Wheat.*	
	1932-33.	1935-36.	1932-33.	1935-36.	1932-33.	1935-36.
Acres.	No.	No.	acres.	acres.	bushels.	bushels.
1— 30	120	46	1,481	500	20,040	4,959
31— 320	1,957	1,346	124,653	74,379	1,716,066	881,250
321— 640	4,120	3,672	728,930	554,858	12,303,432	8,313,171
641— 1,280	5,786	5,411	1,605,032	1,317,491	27,235,548	17,724,894
1,281— 2,000	2,726	2,469	974,610	798,765	15,014,478	8,351,625
2,001— 3,000	1,584	1,443	617,967	503,730	9,942,258	5,877,531
3,001— 4,000	580	522	241,118	183,523	4,026,135	2,272,737
4,001— 5,000	308	310	131,038	114,861	2,131,374	1,396,437
5,001— 7,500	364	340	168,235	141,250	2,818,479	1,813,632
7,501— 10,000	138	118	78,865	54,146	1,358,916	651,570
10,001— 15,000	107	112	65,003	61,395	1,125,729	803,064
15,001— 20,000	40	26	27,848	16,258	513,009	271,824
20,001— 30,000	33	25	16,832	11,191	286,320	191,319
30,001— 40,000	16	10	12,571	10,344	269,838	216,534
40,001— 50,000	6	4	3,802	4,780	38,853	19,035
50,001—100,000	5	6	2,536	1,495	23,085	17,010
100,001 and over	2	1	1,489	250	11,769	F
Total	17,892	15,861	4,802,010	3,849,216	78,835,329	48,806,592

\* Excluding Coastal Divisions.

F—Failure.

This dissection shows that the decline in the number of wheat-growers was relatively greatest (33 per cent.) amongst the small holdings (up to 320 acres). For holdings in the 321 to 2,000 acres series (which probably include the greater proportion of farmers whose livelihood is derived

principally from wheat-growing) there was a decline of about  $8\frac{1}{2}$  per cent. A consideration of the area sown in relation to the size and number of holdings indicates that frequently wheat-growing is associated with other rural pursuits, and the next table illustrates the extent to which sheep grazing was practiced on the farms on which wheat was grown in the years 1932-33 and 1935-36.

Size of Sheep Flocks.	Flocks on Holdings Growing Wheat for Grain.*		Sheep on Holdings Growing Wheat for Grain.*	
	1932-33.	1935-36.	1932-33.	1935-36.
	No.	No.	No.	No.
1— 49 ... ..	590	458	15,326	11,133
50— 99 ... ..	615	462	43,814	34,154
100— 149 ... ..	801	743	96,521	89,884
150— 199 ... ..	795	739	135,311	127,478
200— 299 ... ..	1,522	1,674	368,105	406,630
300— 399 ... ..	1,367	1,476	463,131	501,904
400— 499 ... ..	1,216	1,233	533,240	542,540
500— 749 ... ..	2,073	2,165	1,256,397	1,313,207
750— 999 ... ..	1,339	1,183	1,146,117	1,017,680
1,000—1,499 ... ..	1,552	1,368	1,866,348	1,649,658
1,500—1,999 ... ..	815	657	1,389,872	1,132,510
2,000—2,999 ... ..	842	663	2,027,529	1,596,146
3,000—3,999 ... ..	349	286	1,185,474	984,072
4,000—4,999 ... ..	200	139	880,293	619,127
5,000—9,999 ... ..	320	267	2,184,326	1,841,442
10,000 and over ... ..	130	92	2,252,402	1,514,313
Total ... ..	14,526	13,605	15,844,206	13,381,878

\* Excluding Coastal Divisions.

Thus, of 15,861 holdings on which wheat for grain was grown in 1935-36, no less than 13,605 also carried sheep, with 8,950 holdings with flocks of less than 750 sheep. The number of acres of wheat exceeded the number of sheep pastured on 2,878 holdings. There were only 2,256 holdings growing wheat on which there were no sheep.

Compared with 1932-33 there was a decrease of 1,110 holdings growing wheat and carrying no sheep. While flocks of less than 200 decreased by 399, those of from 200 to 750 increased from 6,178 to 6,548, notwithstanding the decline in the total number of holdings on which wheat was grown.

At the same time wheat-growing in conjunction with flocks of 750 or more sheep contracted materially, holdings in this category numbering 4,655 in 1935-36 in comparison with 5,547 in 1932-33.

A probable explanation is that under the stress of the depression many graziers sought to augment incomes by growing wheat. Some wheat-growing by sharefarmers on formerly purely pastoral holdings also probably occurred. With the recovery of wool prices some of these growers probably retired from wheat-growing, whilst the attraction of good wool values has apparently occasioned the increase in the number of moderately sized flocks on wheat farms during the period of low prices for wheat.

The growing of wheat in combination with dairying, though not quite so common in 1935-36 as in 1932-33, was still considerable. There were registered dairies on about 11 per cent. of the holdings growing wheat for grain in 1935-36 compared with 12.8 per cent. in 1932-33. Many wheat-farmers have also associated pig-raising with their agricultural activities, and in 1935-36 there were 5,418 holdings, or 34 per cent. of the total growing wheat, on which pigs were raised. The following table affords information regarding the practice of dairying in association with the growing of wheat for grain in the seasons under review:—

Size of Registered Dairies.	Registered Dairies on Holdings Growing Wheat for Grain.*		Cows in Registered Dairies on Holdings Growing Wheat for Grain.*	
	1932-33.	1935-36.	1932-33.	1935-36.
Cows.	No.	No.	No.	No.
1— 4 ... ..	38	33	126	107
5— 9 ... ..	279	217	2,058	1,584
10—14 ... ..	438	337	5,209	4,031
15—19 ... ..	369	271	6,192	4,610
20—29 ... ..	450	337	10,667	8,044
30—49 ... ..	428	305	16,100	11,412
50—99 ... ..	239	193	15,430	12,906
100 and over ... ..	42	47	5,984	6,677
Total ... ..	2,283	1,740	61,766	49,371

\* Excluding Coastal Divisions.

It is clear that there are relatively few farms devoted exclusively to wheat-growing, and many wheat-growers who derive a substantial proportion of their livelihood from supplementary farming activities. In 1935-36 there were in New South Wales (exclusive of the Coastal Divisions) but 1,318 holdings on which wheat for grain was grown without sheep, pigs or a registered dairy, and it is possible that of these some may have been

applied to supplementary forms of agriculture or to other activities such as the raising of cattle for slaughter. It is also apparent that wheat for grain is grown on many holdings on which agriculture is but a subsidiary practice to the major purposes to which they are devoted. To make a convenient display of the extent to which wheat-farming is combined with some other important forms of rural activity, the pertinent facts made available by these special compilations are assembled in comparative form in the appended statement:—

Holdings Growing Wheat for Grain.*							1932-33.	1935-36.
<b>1. Holdings growing wheat—</b>								
(a) Number	...	...	...	...	...	...	17,892	15,861
(b) Area of holdings	...	...	...	...	acres	...	26,964,192	24,337,567
(c) Area sown with wheat	...	...	...	...	acres	...	4,802,019	3,849,216
(d) Production	...	...	...	...	bushels	...	78,835,329	48,806,592
<b>2. Holdings also depasturing sheep—</b>								
(a) Number	...	...	...	...	...	...	14,562	13,605
(b) Number as proportion of 1 (a)	...	...	...	...	per cent.	...	81.4	85.8
(c) Sheep on these holdings	...	...	...	...	No.	...	15,844,206	13,381,878
(d) 2 (c) as proportion of all sheep*	...	...	...	...	per cent.	...	30.2	26.4
<b>3. Holdings also having registered dairies—</b>								
(a) Number	...	...	...	...	...	...	2,283	1,740
(b) Number as proportion of 1 (a)	...	...	...	...	per cent.	...	12.8	11.0
(c) Cows on these holdings	...	...	...	...	No.	...	61,766	49,371
(d) 3 (c) as proportion of all cows in registered dairies*	...	...	...	...	per cent.	...	34.9	30.5
<b>4. Holdings also raising pigs—</b>								
(a) Number	...	...	...	...	...	...	.....	5,418
(b) Number as proportion of 1 (a)	...	...	...	...	per cent.	...	.....	34.2
(c) Pigs on these holdings	...	...	...	...	No.	...	.....	58,934
(d) 4 (c) as proportion of all pigs*	...	...	...	...	per cent.	...	.....	49.1

\* Exclusive of Coastal Divisions.

The figures and percentages shown relate to all holdings on which wheat for grain was grown, and the sheep, dairy cows and pigs thereon, in New South Wales exclusive, in all cases, of the Coastal Divisions.

*Wheat Exports.*

The following table covering the oversea export of wheat during the past six years will indicate in some measure the fluctuations in the marketing of this commodity from year to year but should be read in conjunction with the next succeeding table showing exports of flour from the State:—

Destination.	Quantity of wheat (grain) exported oversea from New South Wales. (Year ended 30th June).					
	1928-29.	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
United Kingdom	6,633,858	11,312,656	9,410,897	6,339,662	7,093,840	14,222,126
Irish Free State	377,864	873,853	3,439,752	3,477,490	1,520,358	2,643,215
Belgium .....	405,161	545,093	424,490	18,666	250,185	1,547,918
Netherlands.....	435,778	362,537	306,233	41,112	...	46,666
France .....	312,576	350,638	...	...	...	...
Germany .....	385,545	111,035	...	...	...	...
Greece .....	545,538	...	...	...	...	...
Italy .....	1,523,346	3,287,620	1,789,270	36,868	...	1,129,113
Malta .....	443,203	18,627	46,455	...	54,160	22,396
Sweden.....	370,830	...	...	...	...	...
Egypt .....	445,077	65,348	26,097	...	...	...
Union Sth. Africa	97,543	200,517	2,000	...	...	...
Chili and Peru	746,720	241,532	284,000	376	...	...
India .....	2,295,186	234,925	...	...	...	...
China .....	619,035	4,833,048	10,456,010	303,137	3,869,807	3,197,511
Japan .....	2,722,358	8,506,528	5,026,335	56,003	2,452,377	173,988
New Zealand ...	231,302	103,105	189,093	5,128	7,875	177,798
Other Countries	345,485	8,172	275,163	34,380	29,165	39,592
Total	18,936,405	31,055,234	31,675,795	10,312,822	15,277,767	23,200,323

The table shows that with a well-defined trend the disposal of wheat to European destinations, both as regards quantity and distribution, has declined greatly in the last six years. Efforts of Continental countries to attain greater self-sufficiency as regards cereal requirements for military reasons, and to a degree, because of economic necessities, have been outstanding as a factor in this development. The retarded disposal of the harvest was an important factor in the substantial decline in exports in the year 1933-34. Disposal proceeded more actively in 1934-35 and 1935-36, and the carry-over at 30th November, 1936 (2,719,287 bushels, including 34,351 tons of flour) was one of the smallest in the last ten years.

A similar table with reference to the oversea export of flour is shown hereunder, the quantities being converted into the equivalent in bushels of wheat:—

Destination.	Quantity of flour exported oversea from New South Wales. (Year ended 30th June).					
	1928-29.	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
	Equivalent in bushels of wheat.					
United Kingdom ...	527,362	2,713,065	1,821,981	2,388,917	1,430,494	1,744,931
New Zealand .....	78,560	206,352	111,871	48,708	21,078	19,258
Egypt .....	4,177,953	1,678,550	122,462	323,942	101,765	133,538
Sudan .....	125,049	149,657	348,952	401,368	267,492	380,026
Hong Kong .....	25,039	53,340	1,536,964	633,055	1,300,267	837,045
Malaya .....	1,066,298	1,032,199	943,924	1,007,794	1,391,760	1,319,212
Philippine Islands ...	356,902	390,384	436,502	420,026	1,018,637	1,425,481
China .....	2,832	11,323	2,823,708	1,790,133	26,220	31,683
Neth'lands, E. Indies	1,176,480	1,290,019	1,249,862	1,307,678	1,471,752	1,455,793
Fiji .....	200,606	154,771	123,453	124,212	133,966	168,512
New Caledonia .....	195,079	190,781	156,698	147,749	165,238	167,740
Other Countries .....	861,433	867,789	1,730,412	1,407,748	5,750,642	3,288,814
Total .....	8,793,602	8,738,230	11,411,789	10,001,330	13,079,311	10,972,033

Whilst the table reveals a fairly regular trade with such countries as Malaya, the Philippine Islands, the Netherlands East Indies and Pacific Islands, these together account for a comparatively small proportion of the flour export trade, and disposal to other destinations is subject to considerable fluctuation. Variations in aggregate exports over the last three years were attributable mainly to the disposal to Manchukuo of flour equivalent to 4,391,000 bushels of wheat in 1934-35 and the smaller quantity of 1,909,493 million bushels in 1935-36.

#### *Consumption of Wheat in New South Wales.*

Estimates of the average annual consumption of wheat in New South Wales in periods from 1892 to 1929 were published on page 552 of the Year Book for 1929-30. These were based upon total recorded production, less net exports, with due adjustment for recorded stocks and for seed wheat.

Additional data have been obtained since the year 1927 which enable estimates to be made of consumption exclusive of seed wheat and of wheat retained for use in the locality in which it is grown. Direct returns are now collected as to the quantity of seed wheat used; these show an average of approximately 1 bushel per acre.

For the purpose of the estimates, the wheat year is considered to extend from 1st December to 30th November, at which latter date returns of stocks are obtained. As, however, in some years considerable quantities of new season's wheat arrive on the market in the latter half of November and as records of wheat in transit are difficult to obtain it is not possible to estimate closely the consumption of individual years.

It is estimated that the average annual consumption of wheat in New South Wales at the present time is 17,000,000 bushels plus a varying annual requirement for seed wheat. This total includes an annual average of 12,750,000 bushels converted into flour for home consumption and 4,250,000 bushels for various other purposes—principally poultry feed. The amount required for seed varies from year to year with fluctuations in the area sown and may range from a little under 4,000,000 bushels to a little over 5,000,000 bushels. On the average, seed requirements may be estimated at 4,500,000 bushels and the total annual requirement at 21,500,000 bushels under present circumstances.

*Marketing Wheat.*

As interstate trade in wheat and flour is comparatively small, the maintenance and further development of the wheat industry in New South Wales are dependent largely on world demand, on the efficiency of production, the facilities for gaining access to overseas markets, and on the maintenance of such internal conditions that it will pay local farmers to grow wheat. The price of wheat for export is determined by world's parity, which fluctuates with the world supply and demand. The market for the exportable surplus of local wheat is found chiefly in Europe, but quantities of flour are sent to the countries and islands of the Pacific and Indian Oceans, and since 1931 large quantities of wheat have been shipped to China and Japan. The market for local wheat in Europe is affected by the competition of great wheat-producing countries nearer the market—the United States, Canada, the Argentine, and Russia—which derive advantages from shorter distances and lower ocean freights. These advantages, however, are counteracted to some extent by the greater land haulage necessary from the interior to the coast of some of these countries. In recent years greatly increased production by many European countries, and the imposition of tariffs and import quotas, have diminished international trade in wheat. The decline in the European market, however, has, until lately, been offset to a considerable extent by substantially increased exports to eastern countries, notably China and Japan.

The movement of wheat and flour oversea and interstate from New South Wales is shown below. The particulars for the respective years relate to the twelve months ending 30th November, and therefore represent the movement following each harvest. Flour is expressed at its equivalent in wheat, viz., 48 bushels of grain to 2,000 lb. flour.

Year ended 30th Nov.	Export Oversea.		Net Export Interstate.*		Total Net Export.			Recorded Stocks at 30th Nov.
	Wheat.	Flour.	Wheat.	Flour.	Wheat.	Flour.	Grand Total.	Wheat and Flour.

Expressed in thousand bushels of wheat.

1923	...	2,020	6,844	2,065	1,170	4,085	8,014	12,099	2,229
1924	...	5,433	6,103	3,985	1,246	9,418	7,349	16,767	2,223
1925	...	31,824	7,299	3,013	1,272	34,837	8,571	43,408	1,863
1926	...	9,250	6,370	1,878	1,306	11,128	7,676	18,804	1,676
1927	...	12,813	7,703	4,957	1,769	17,770	9,472	27,242	4,870
1928	...	4,306	6,165	1,386	1,275	5,692	7,440	13,132	2,750
1929	...	17,120	7,879	2,912	1,948	20,032	9,827	29,859	5,158
1930	...	4,633	7,141	2,128	1,377	6,761	8,518	15,279	5,356
1931	...	33,836	9,341	1,973	574	35,809	9,915	45,724	5,453
1932	...	25,920	10,285	3,970	661	29,890	10,946	40,836	2,640
1933	...	34,669	11,256	7,611	1,031	42,280	12,287	54,567	6,110
1934	...	10,430	11,513	4,015	1,335	14,445	12,848	27,293	13,302
1935	...	16,324	12,666	2,928	1,084	19,252	13,750	33,002	5,980
1936	...	16,442	8,828	5,969	888	22,411	9,716	32,127	2,719

\* Partly estimated.

Owing to the difficulty of obtaining accurate records of interstate movements of wheat and of stocks of wheat and flour, the above figures are in some degree approximate. It is not possible to use them in conjunction with the recorded crop to estimate annual wheat consumption in New South Wales, because the recorded crop also is necessarily an approximation.

The table shows that the expansion in the export flour trade between 1930-31 and 1934-35 was not sustained in 1935-36 when disposals beyond the State fell back to the former level. There have been marked fluctuations in the quantity of wheat exported.

Further particulars of the flour trade of New South Wales are shown in the following table relating to financial years which do not, however, correspond very closely to wheat seasons:—

Particulars.	Year ended 30th June.						
	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Wheat gristed ...	bus. 20,572,332	bus. 21,656,919	bus. 23,744,506	bus. 25,221,428	bus. 24,033,438	bus. 27,041,908	bus. 25,276,714
Flour expressed in tons (2,000 lb.).							
Flour produced ...	432,472	448,439	400,662	525,651	496,779	555,173	523,281
Flour exported—							
Oversea* ...	131,885	182,706	211,354	238,466	209,055	273,071	231,067
Interstate† ...	42,144	26,151	20,055	26,095	33,375	31,699	24,568
Flour imported—							
Oversea ...	15	29	24	53	22	37	24
Interstate† ...	7,051	8,144	6,453	6,907	6,841	7,132	6,814

\* Including ships' stores.

† Approximate.

The average quantity of flour consumed in New South Wales in the period, was approximately 262,000 tons per annum. The estimated consumption per head of population is shown in the chapter entitled "Food and Prices," and some further details regarding flour-milling are shown in chapter "Factories" of the Year Book.

### *Grading of Wheat.*

The Wheat Act passed early in 1927 provided for the establishment of grades and standards of wheat in accordance with the recommendations of a Wheat Standards Board, but definite action to establish grades has not yet been taken. The silo authorities have, however, made provision for the separate storage of a superior class for milling wheat known as "New South Wales Hard White."

Wheat for export is marketed on the basis of a single standard known as f.a.q. or fair average quality. In New South Wales the standard is now determined by an independent committee appointed by the Government, acting with the Grain Trade Section of the Chamber of Commerce, which formerly controlled the fixing of the standard. The Committee comprises a Government nominee (as chairman) and one representative each of the shippers, growers, millers and the Department of Agriculture. Samples obtained from each of the wheat districts are weighed in proportions based on production and an average struck, which is used as a standard in all wheat export transactions. Distinction is maintained between white and red wheats and no mixtures of white and red varieties are accepted for bulk handling. The Schopper weighing machine is used in fixing standards.

The following comparison shows the standard adopted in New South Wales for each of the past ten seasons, and the date on which it was fixed in each year:—

Year.	Date Fixed.	Weight of Bushel of Wheat. f.a.q.	Year.	Date Fixed.	Weight of Bushel of Wheat. f.a.q.
1924-25	10th Feb., 1925	60½	1931-32	27th Jan., 1932	61½
1925-26	22nd Jan., 1926	62½	1932-33	30th Jan., 1933	61½
1926-27	31st Jan., 1927	61½	1933-34	16th Feb., 1934	59
1927-28	19th Jan., 1928	60½	1934-35	31st Jan., 1935	61½
1928-29	12th Jan., 1929	63	1935-36	24th Jan., 1936	64
1929-30	31st Jan., 1930	61½	1936-37	5th Feb., 1937	62
1930-31	2nd Feb., 1931	59½			

In certain seasons, when a substantial quantity of the grain is pinched or damaged by adverse seasonal conditions, a "second" grade is determined. Second grade standards were fixed for wheat grown in 1930-31, 1931-32, 1933-34 and 1934-35, with the weight per bushel varying from 3½ lb. to 4 lb. below the f.a.q. standard weight for those seasons.

Wheat of excellent quality was produced in 1935-36 and the f.a.q. standard determined for that season (64 lb. to the bushel) was higher than that fixed for any year since 1913-14.

The weights shown above are those used for guidance in determining whether particular lots of wheat are at or above fair average quality, but not as a measure of quantity. Wheat is normally sold in New South Wales by weight (bushel of 60 lb.), and not by volume.

During the 1930-31 and previous seasons between 60 per cent. and 70 per cent. of the wheat was bagged on the farm and carted to the nearest railway station, whence, if intended for export or metropolitan use, it was carried by rail to Sydney. In recent seasons, however, the proportion of bagged wheat so handled has declined; only 37 per cent. of the wheat received at rail in 1935-36 was in bags, and the bulk wheat has shown a corresponding increase. At some of the stations the Railway Department has erected sheds, and a small charge is made for storage.

For the shipment of wheat in Sydney Harbour special facilities—wharfage, with sheds, elevator and modern mechanical equipment—have been provided so that the grain may be transferred expeditiously from railway truck to ship's hold. Bagged wheat is handled in large quantities at Pyrmont, and both bagged and bulk cargoes are loaded at Glebe Island. There is also a terminal elevator at Newcastle.

#### Wheat Arrivals.

As a rule small quantities of new season's wheat become available towards the end of November, the actual time varying under seasonal influences. Usually, most of the crop intended for sale is sent to rail for transport before the end of February. The following comparison shows the quantity

of wheat received at country railway stations in bags and in bulk during the seasons 1934-35 and 1935-36. Adjustments made in order to discriminate between old and new seasons' wheat render the totals approximate only:

Four Weeks ended—	Quantity of Wheat Re- ceived during Four Weeks. *	Total Quan- tity of Wheat Received to end of Four Weeks. *	Four Weeks ended—	Quantity of Wheat Re- ceived during Four Weeks *	Total Quan- tity of Wheat Received to end of Four Weeks. *
Season. 1934-35.	thousand	bushels.	Season. 1935-36.	thousand	bushels.
To November 24	175	175	To November 23	2,391	2,391
December .. 22	15,185	15,360	December... 21	24,461	26,851
January ... 19	19,123	34,483	January ... 18	9,587	36,438
February ... 16	3,049	37,532	February ... 15	921	37,359
March ... 16	510	38,042	March ... 14	341	37,700
April ... 13	296	38,338	April ... 11	400	38,100
May ... 11	183	38,521	May ... 9	256	38,356
June ... 8	261	38,782	June ... 6	245	38,601
July ... 6	123	39,005	July ... 4	243	38,844
August ... 3	165	39,070	August ... 1	265	39,109
August ... 31	131	39,201	August ... 29	386	39,495
September.. 28	88	39,289	September.. 26	175	39,670
October ... 26	40	39,329	October ... 24	211	39,981
November.. 23	37	39,366	November.. 22	81	39,962

\* Not after deducting withdrawals.

The proportion of railway receipts for the season delivered at railhead by mid-February was 93.5 per cent. in 1935-36, compared with 95.3 per cent. and 92.3 per cent. in the corresponding periods of 1934-35 and 1933-34, respectively.

#### *Bulk Handling.*

The circumstances leading to the erection of bulk handling facilities were described at page 584 of the Year Book for 1928-29.

The Grain Elevator system at 30th June, 1937, comprised a concrete and steel shipping elevator at Sydney, with a storage capacity of 7,500,000 bushels at one filling, and 175 elevators situated at the more important wheat receiving stations throughout the State. These country elevators, which have direct access to rail, have a storage capacity at one filling of 23,123,000 bushels. Of the country elevators completed, seventeen of them with a capacity of 1,350,000 bushels, were in operation for the first time during the 1936-37 season. In addition, a Terminal Elevator has been constructed at Newcastle, with a capacity at one filling of 800,000 bushels.

The Terminal Elevators, Sydney and Newcastle, have been built and equipped to meet every need for receiving, handling and shipping classified wheats, including facilities for cleaning and conditioning. Electric power is used throughout. The Terminal Elevator at Sydney is connected with the railway system of the State by four lines of rail, and has a receiving capacity of 6,000 tons (approximately 224,000 bushels) per day, and a shipping capacity of 12,000 tons (approximately 448,000 bushels) per day of eight hours. At Newcastle the rates are 2,000 tons per day and 12,000 tons respectively.

The country plants, with few exceptions, are equipped for receiving wheat in bulk from farmers' waggons and loading into bulk trucks. The later type plants are fitted with their own weighbridges for inwards weighing, and the majority of plants are equipped with outward scales. The storage capacity of the individual country plants varies from 30,000

bushels to 350,000 bushels. They are built of reinforced concrete and steel with corrugated galvanised iron coverings, and practically all of them are now capable of receiving classified or graded wheat in bulk. Electric energy being generally unavailable, kerosene-burning engines are used as the standard power unit. Country plants are capable of receiving or delivering grain at the rate of 70 tons per hour.

At present wheat is generally transported from the farms to the silos in bags fastened by clips or sewn, the bags being emptied and returned to the farmer for use in subsequent seasons. As the system is becoming more firmly established, farmers are acquiring bulk waggons. For conveyance from the country stations to the terminal, special railway trucks are provided.

Upon delivery of his wheat at the silo, the owner receives a bulk wheat warrant showing particulars of the quantity, and quality of wheat, and place where wheat originally received. The warrant is a negotiable document transferable by endorsement of the owner, and delivery of wheat is made on production of the warrant, properly endorsed, and payment of prescribed fees.

The loan expenditure on the works constructed to 30th June, 1937, was £5,137,962 15s. 7d., including an amount of £30,835 16s. expended from the Unemployment Relief Fund. The system was first put into operation in 1920-21, and has been developed steadily, as shown by the following table:—

Season.	Number of Plants Available in Country Districts.	Storage Capacity of Plants Available in Country Districts.*	Wheat Received.			Proportion of Wheat Received in Elevators.	
			In Country Elevators.	In Terminal Elevators from Non-Silo Stations.	Total.	To Total Crop.	To Total Quantity Received at Rail.
		bushels.	bushels.	bushels.	bushels.	per cent.	per cent
1920-21	28	5,450,000	†	†	1,941,694	3·5	4·1
1921-22	28	5,450,000	†	†	4,336,833	10·1	12·7
1922-23	54	11,550,000	†	†	4,596,563	16·0	22·7
1923-24	58	12,550,000	5,410,574	1,028,232	6,438,806	19·4	25·4
1924-25	61	13,250,000	16,334,813	1,437,058	17,771,871	29·7	35·1
1925-26	62	13,500,000	8,295,436	841,185	9,136,621	27·0	34·9
1926-27	66	14,100,000	12,244,726	515,772	12,760,498	27·0	34·5
1927-28	73	15,180,000	6,177,720	169,459	6,347,179	23·5	32·3
1928-29	84	15,630,000	14,777,954	385,561	15,163,515	30·8	36·7
1929-30	90	15,863,000	8,739,874	146,869	8,886,743	26·2	34·2
1930-31	99	16,373,000	22,948,114	697,295	23,645,409	35·9	41·3
1931-32	105	16,613,000	23,877,542	2,123,344	26,000,886	47·6	52·6
1932-33	111	17,183,000	33,954,534	500,877	34,455,411	43·7	51·7
1933-34	119	17,693,000	21,229,928	566,575	21,796,503	38·2	46·9
1934-35	149	21,083,000	21,509,227	Nil.	21,509,227	44·2	54·6
1935-36	168	21,773,000	24,811,726	295,897	25,107,623	51·4	62·8
1936-37	175	23,123,000	29,087,579	142,981	29,230,560	53·3 †	64·3 †

\* At one filling.

† Subject to revision.

The quantity of wheat handled in bulk naturally fluctuates under the influence of the marked seasonal variations in the size of the wheat crop.

The quantities of wheat shipped in bulk during recent seasons were:—15,246,970 bushels in 1930-31; 16,319,494 bushels in 1931-32; 24,286,105 bushels in 1932-33; 9,832,179 bushels in 1933-34; 11,719 bushels in 1934-35, and 13,959,993 bushels in 1935-36. Approximately 45 per cent. of the quantity of grain exported overseas was shipped in bulk in 1930-31; 63 per cent. in 1931-32; 70 per cent. in 1932-33; 94 per cent. in 1933-34; 77 per cent. in 1934-35, and 85 per cent. in 1935-36.

Handling charges for wheat received into elevators after 1st October, 1935, were reduced substantially under a new scale which came into operation as from that date. From farmer's waggon through country elevator the charge was reduced from 2d. to 1d. per bushel, and if transferred to the terminal elevator from 2½d. to 1½d. per bushel. For wheat received at terminal elevator from non-silo stations and subsequent loading out the rate became ½d. in lieu of 1d. per bushel if in bulk and 1d. in place of 1½d. per bushel if in bags. These services include fixing quality, elevating, binning and weighing in and out (and, in the case of bagged wheat, the bundling and re-consigning of bags) as well as storage to the last day of February, after which a storage charge of ½d. per bushel per week was incurred. In 1934-35 storage charges commenced from 1st August. The handling charges for wheat received into the elevators were again altered as from 1st October, 1936, an additional ½d. per bushel being charged in respect of all handling services. The storage period was, however, extended to the 31st March, after which a storage charge of ½d. per bushel per week was incurred.

The silo management pays rail freight incurred by it in handling the grain, and this, together with all fees and other charges, is paid by the holder of the warrant upon delivery of the wheat from the silo. Wheat of second grade was received in 1936-37, subject to its being fit for milling with chondrometer weight of 56 lb. or more per bushel.

The financial operations in connection with the silos in the years ended 30th June, 1936 and 1937, were as follow:—

Receipts.			Expenditure.		
	1935-36. £	1936-37. £		1935-36. £	1936-37. £
Handling and storage fees ... ..	349,316	329,019	Maintenance and working expenses ...	95,760	101,653
Repayments to previous years' Votes ...	172	79	Rates ... ..	80	37
Sundry fees ... ..	4,129	5,697	Wheat adjustments ...	11,266	2,086
Sales of damaged grain	3,448	3,794	Receipts returned ...	159	1,489
Railway freight repayments ... ..	512,378	440,668	Railway freight ...	434,020	405,127
			Miscellaneous ... ..	—	—
Total ... ..	869,443	779,257	Total ... ..	541,285	510,392

The amounts shown refer to cash received and expended in the periods covered. Excluding payments for railway freight, for which the silo management is agent only, the receipts in 1935-36 were £357,065, expenditure £107,265 and a cash balance of £349,800, representing net earnings, was available to meet interest charges, depreciation, etc. In 1936-37 the corresponding figures were receipts £333,589, expenditure £105,265, and the balance, £233,334.

#### Wheat Freights.

In the conditions governing the marketing of wheat abroad, the shipping space offering and its cost are very important factors. The greater part of the wheat exported overseas is carried by tramp cargo vessels and sailing ships chartered for the purpose, though considerable quantities are transported as "parcels" by the regular overseas shipping services. Rates of freight are often subject to substantial variation throughout a season, and frequently there is a wide range in concurrent quotations.

The average rates of ocean freight from Sydney to the United Kingdom for the year ended November and in the principal exporting months of successive recent seasons have been as follow:—

Season.	Average Ocean Freight per Bushel of Wheat.*								
	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	Year ended Nov. †
	English Currency.								
	d.	d.	d.	d.	d.	d.	d.	d.	d.
1926-27 ...	16½	16½	15	15½	15	12¾	12½	13	13½
1927-28 ...	12	13	11	10	10	11	11½	11½	11½
1928-29 ...	13¾	13¾	13	12½	11	9½	8½	8	10½
1929-30 ...	8½	8½	8½	7½	7½	8½	8½	9	9
1930-31 ...	10	10½	10½	10½	10	9½	9½	9½	9½
1931-32 ...	9¾	9¾	9½	9½	9½	9	8½	7½	9
1932-33 ...	9	9½	9½	8¾	8	7½	7½	7½	8
1933-34 ...	8½	8½	8½	8½	7½	7½	8	8½	8½
1934-35 ...	9	8½	8½	7½	7½	8	8	8½	8½
1935-36 ...	9½	9½	9½	9½	9½	9½	9½	9½	9½
1936-37 ...	—	10	12	12½	13½	13½	14½	15	—

\* For entire cargoes shipped during month irrespective of date of arrangement of charter.

† Average of months.

The rates of freight shown represent the mean of the weekly quotes for complete cargoes as shown in the International Crop Report. The rates per ton were converted into rates per bushel and are expressed in sterling. If freight was prepaid in Australia shippers were required to pay an additional charge in respect of exchange in 1931-32, and following years.

#### Wheat Pools.

An account of the compulsory wheat pools and of the basis upon which they were organised is contained in issues of the Year Book for 1921 and previous years. A summary of the final returns is published in the Year Book for 1923 at page 489. Ballots of wheatgrowers on the question of establishing compulsory wheat pools under the Marketing Act were conducted during September in each of the years 1928, 1929 and 1930, the proportion of affirmative votes in the respective years being 44.69 per cent., 60.53 per cent. and 62.84 per cent. In July, 1931, a new ballot was conducted under an amendment of the Act requiring an absolute majority in lieu of a two-thirds majority to carry the proposal. A total of approximately 17,000 valid votes were cast, and of these 42.64 per cent. favoured the proposal.

Voluntary wheat pools were initiated in 1921-22, when 22,785,560 bushels, or about two-thirds the wheat received at rail in that year, entered the pool. The system gradually lost favour with growers, and in 1927-28 the quantity pooled was slightly more than one million bushels, or about one-twentieth of the wheat delivered to rail. A statement showing the results of voluntary pools from 1921-22 to 1927-28 was published at page 36 of the 1933-34 issue of the "Official Year Book." Only very limited quantities of wheat have been marketed through pools in recent years.

#### Prices of Wheat.

The following table gives the average prices per bushel ruling in New South Wales in each year since 1911. Figures for the years 1898 to 1910 appeared at page 37 of the 1933-34 issue. The figures for the years 1865 onward, published in the Year Book for 1919, exhibit clearly the tendency

towards a gradual reduction in the value of the cereal down to 1895, when the price was the lowest of the series. In 1896, however, owing to a decrease in the world's supplies, the price rose considerably, and led to an extension of cultivation throughout Australia. In the early years, when local production was deficient, the price in Sydney was generally governed by the prices obtained in the markets of Australian States where a surplus had been produced. Since the development of the export trade, however, it has been determined largely by the prices ruling in the world's market, although marked deficiencies in the local crop (such as occurred in 1920) at times have a determining influence on prices.

Year ended Dec. 31	Price of Wheat, Sydney.*			Estimated Net Return to Farmer. †	Year ended Dec. 31.	Price of Wheat, Sydney.*			Estimated Net Return to Farmer. †
	February.	March.	Average Value for Year. ‡			February.	March.	Average Value for Year. ‡	
	per bushel.	per bushel.	per bushel.	per bushel.		per bushel.	per bushel.	per bushel.	per bus.
	s. d.	s. d.	s. d.	s. d.		s. d.	s. d.	s. d.	s. d.
1911	3 5	3 3	3 6	3 1	1925	6 9½	6 3½	6 2½	5 7
1912	3 9½	3 8½	4 1	3 3	1926	5 11½	5 8½	6 2	5 1
1913	3 6½	3 7	3 7½	3 3	1927	5 1½	5 0½	5 5	4 6
1914	3 8	3 9½	4 1½	3 2	1928	5 2	5 5½	5 1½	4 7
1915	5 6	5 6	5 5	5 1	1929	4 8½	4 7½	4 10½	4 0
1916	5 1½	5 0½	4 10	4 0	1930	4 8½	4 5	3 10½	3 2
1917	4 9	4 9	4 9	2 10	1931	2 1½	2 1½	2 5½	1 7
1918	4 9	4 9	4 9	4 1	1932	3 2	3 1	3 0½	2 7**
1919	5 0	5 0	5 1½	4 5	1933	2 8½	2 9½	2 10½	2 3**
1920	8 5*	8 10§	8 7½§	7 6	1934	2 5½	2 6½	2 8½	2 1½**
1921	9 0	9 0	8 8	7 0	1935	2 11½	3 1	3 2½	2 5½**
1922	5 2	5 11	5 8	4 8	1936	3 7	3 8	4 2½	3 1½**
1923	5 8	5 7	5 3½	4 3	1937	5 0½	5 5	5 0½	4 8
1924	4 7½	4 7	5 5	4 3					

\* Price officially fixed on trucks Sydney of bagged wheat for flour for home consumption, 1915-1921. From 1922 to 1936, Shippers prices for bagged on trucks Sydney; silo wheat ex. trucks, Sydney from 1936-37.

† Unweighted average of daily quotes. ‡ Weighted average price of wheat (harvested in season ending in year shown in first column) delivered at country railway sidings and elevators after deducting net cost of bags. § Imported wheat. || Voluntary pool price. \*\* Excluding bounty averaging 4d., 3d., 3s.83d. 5s.53d. and 2-77d., per bushel in 1931-32, 1932-33, 1933-34, 1934-35, and 1935-36 respectively.

The Sydney prices quoted up to 1935-36 are per imperial bushel (60 lb.) of f.a.q. wheat in three-bushel bags. The bag is sold with the wheat and is included in the weight paid for as wheat. From 1936-37 the prices are per bushel of f.a.q. bulk wheat. The monthly average represent the mean of daily prices, and the annual average is the mean of the monthly averages. Formerly practically the whole of the wheat marketed was in buyers' hands before the end of March, but in some years the practice of pooling, and more recently the introduction of the wheat elevators and storage by farmers have extended the period of marketing. As adequate data were not available prior to 1927 it was very difficult to determine satisfactorily the estimated net return to farmers but latterly additional information has been obtained and the averages for 1927 and subsequent years are close approximations applicable to the whole of the harvest on the basis stated in the footnote to the table.

The course of wheat prices between 1924 and 1930, and between 1930 and 1934, was traced at page 75 of the 1932-33, and page 37 of the 1933-34 issue, of this Year Book. A material increase in world production and the accumulation of large surplus stocks in major exporting countries, reinforced by the rapidly developing world-wide economic depression, carried the price of wheat gradually downward during 1930. In May the market broke completely, so that by the end of 1930 wheat was sold in Sydney at

2s. 2d. per bushel, or the lowest level on record. With only partial recovery in the latter half of 1931 and in 1932 and a recession in 1933, the price was, with the exception of short-enduring spurts, relatively depressed until early in 1935. Gradually, as world surpluses were progressively reduced by the incidence in important exporting countries of a series of crop failures, and, in some cases, curtailment of the area cultivated with wheat, prices tended to recover. For the season ended November, 1935, the average value was 3s. 2½d. per bushel. A gradual upward trend was maintained in the first seven months of 1936 and crop failures in Canada and the United States caused a sharp advance of about 8d. per bushel in August for which month the average of daily prices in Sydney was about 4s. 8d. per bushel. By March, 1937, the changed statistical position had lifted shippers' offers in Sydney to an average of 5s. 5d. per bushel, since when prices have fluctuated within a few pence of that level. Fluctuations in the rate of exchange in 1930 and 1931, and later, the fixed depreciation of the Australian pound in relation to sterling have been important factors in recent years in determining the price of wheat in Australian currency.

Certain data relating to the prices of Australian wheat in local and over-sea markets have been brought together in the following table, which provides some interesting particulars of the course of prices in Australia and the United Kingdom. Owing to the variation of marketing conditions and the lapse of time between local sales and export and between export from New South Wales and import into the United Kingdom, the prices set against each month are not strictly comparable. The prices in all cases are per bushel of 60 lb. of wheat.

Month.	Season 1934-35.					Season 1935-36.				
	Shippers buying quotes, Sydney.	Average value declared to Customs, Sydney.	Average price c.i.f. Liverpool and Lond'n.	Average import value into United Kingdom.	Average rate of freight to United Kingdom.	Shippers buying quotes, Sydney.	Average value declared to Customs, Sydney.	Average price c.i.f. Liverpool and Lond'n.	Average import value into United Kingdom.	Average rate of freight to United Kingdom.
	*	*	†	†	†	*	*	†	†	†
December ...	s. d. 2 7½	s. d. 2 8½	s. d. 2 11½	s. d. 3 1	s. d. 0 8½	s. d. 3 6	s. d. 3 6	s. d. 3 8½	s. d. 3 8½	s. d. 0 9½
January ...	2 10½	2 6½	2 11	2 11½	0 8½	3 0½	3	3 11	3 9½	0 9½
February ...	2 11½	3 0½	2 11½	2 10	0 7½	3 7	3 9½	3 8½	3 10½	0 9½
March ...	3 1	3 3	3 2	2 10½	0 7½	3 8	3 9½	3 9	3 8½	0 9½
April ...	3 4	3 3½	3 6	3 1½	0 8	3 8½	3 11½	3 9½	3 9	0 9½
May ...	3 3½	3 5	3 4½	3 5½	0 8	3 ½	3 10½	3 10½	3 9½	0 9½
June ...	3 1	3 3	3 3½	3 3	0 8½	3 6½	4 1	3 9½	3 8½	0 9½
July ...	2 11	3 2½	3 2½	3 3½	0 8½	3 11½	4 1	4 1	3 10½	0 9½
August ...	3 1	3 2½	3 4½	3 3½	0 8½	4 7½	4 5	4 9½	4 0½	0 9½
September ...	3 4½	3 5½	3 8½	3 3	0 8½	4 7½	4 5½	4 10	4 0½	0 9½
October ...	3 7	3 8½	3 10½	3 5	0 9	4 11	4 7½	4 11	4 1½	0 9½
November ...	3 5½	3 9½	3 7	3 6½	0 9½	4 10	5 0	4 10½	4 8½	†

\* Australian currency.

† Sterling.

‡ Not available.

In considering the prices shown above regard should be paid to the following factors:—

(1) The average of shippers' quotes represents the mean of the daily prices for bagged wheat of fair average quality on trucks Sydney, and they are usually for wheat for prompt delivery.

(2) The average values declared to the Customs relate to wheat exported in bags and in bulk, and refer to the month of shipment. Owing to delay in transferring the exportable portion of the harvest to the seaboard, and the incidence of forward buying, the averages in this column are not closely comparable with the prices in the preceding column.

(3) The average prices c.i.f. Liverpool and London are those quoted for New South Wales wheat in the monthly Crop Reports of the International Institute of Agriculture. The quotations are generally those at the close of business for early delivery.

(4) The average import values into the United Kingdom relate to Australian wheat, and represent the total value c.i.f. place of import or, when consigned for sale, the latest market price in England at time of import.

(5) The average rates of freight are those shown in the International Crop Reports.

The margins between the local and the oversea prices are accounted for mainly by ocean freights, but also in part by cost of exchange, insurance, and handling charges, and in part by exporters' profits and overhead expenses. Rates of exchange (telegraphic transfers) varied as follow:—£102 Australian for £100 in London as from 28th January, 1930, rising, by steps, to £108 10s. in October, 1930, and to £130 by the end of January, 1931, and falling to £125 at the beginning of December, 1931. This rate prevailed at the end of June, 1936.

#### *Governmental Assistance to Wheatgrowers.*

Because of the difficulties associated with the marketing of wheat abroad (see page 549) and the low prices realised for the cereal in recent years (vide page 556), consequent upon the excessive accumulation of world stocks, as illustrated in the discussion of the World Wheat Agreement which follows, the utmost difficulty was experienced by a large section of the wheatgrowers of the State, in common with producers elsewhere, in maintaining themselves in the industry. In view of the necessitous condition of the wheatfarmer and the importance of the wheat industry in the economy of the State, steps were taken in each season 1931-32 to 1935-36 to provide assistance to growers from the public Treasury.

This assistance was given in the form of disbursements on an acreage basis or a bounty on wheat produced, moneys for which were obtained by a tax levied upon flour for local consumption (particulars of which are given at page 524 of this Year Book) supplemented by grants from general revenue.

The amounts provided by the Commonwealth Government for the assistance of wheatgrowers in New South Wales since 1931-32, total approximately £3,650,000. In 1931-32, £950,000 was allocated and absorbed by a bounty at the rate of 4½d. per bushel on wheat of the 1931-32 harvest sold or delivered for sale between 1st October, 1931, and 31st October, 1932.

Distribution of a grant of £570,902 for the 1932-33 wheat season was left to the State, which supplemented the amount from proceeds of the State Flour Acquisition Act. A total of £1,014,449 was distributed to 21,311 growers at rates ranging from 4s. per acre on areas up to 249 acres, to 3s. per acre on areas in excess of 549 acres in respect of land sown with wheat for grain in that season, and including payment in respect of railway freight charges to the extent of ½d. per bushel on all wheat sold or delivered for sale.

The grant of £911,094 made under the Wheatgrowers' Relief Act, 1933, was disbursed on a basis of 4s. 3½d. per acre to wheatgrowers who sowed wheat for grain in 1933 and who, during the year ended 30th June, 1933, derived no taxable income, or furnished evidence to the satisfaction of the State authority that there were circumstances by reason of which assistance was justified. Under these provisions, payment of the precise amount allocated was participated in by 18,067 growers.

Allocations to the State for the 1934-35 wheat season included sums required for payment of bounty at the rate of 3d. per bushel on wheat produced in that season and sold or delivered for sale between 1st October, 1934, and 14th December, 1935, and for distribution on the basis of 3s. per acre in respect of the area sown with wheat for grain during 1934. In addition, the Wheatgrowers' Relief Act, 1935, made available the amount of £100,000 for necessitous cases, where losses were sustained by reason of adverse seasonal influences, pests or disease affecting the season's crop. Bounty paid amounted to £531,593, and payments on the basis of acreage to £590,000, giving an aggregate disbursement of £1,121,593, in addition to which the sum of £100,000 had been wholly expended from the appropriation for relief of necessitous cases. The Commonwealth allocated an amount of £565,284 to New South Wales for the season 1935-36, which was distributed to wheatgrowers on the basis of 2s. 6d. per acre sown with wheat for grain in that season, and the remaining sum after provision for acreage payments was distributed to growers who suffered losses through seasonal adversity, pests, etc., in that season.

*Royal Commission on the Wheat, Flour and Bread Industries.*

On 21st January, 1934, the Commonwealth Government set up a Royal Commission under the chairmanship of Sir Herbert Wm. Gepp, to inquire into and report upon the economic position of the industries of growing, handling and marketing of wheat, manufacturing flour and other commodities and the manufacture, distribution and selling of bread. A short resume of the activities and recommendations of the Commission appeared at page 454 of the 1934-35 edition of this Year Book.

*Wheat and Wheat Products Act, 1935.*

At a conference convened by the Minister for Commerce held in Canberra between 4th and 7th October, 1935, the Commonwealth Government stressed the desirability of some method of assisting the wheat industry being devised which would obviate dependence upon annual grants for its continued existence. As an outcome, the principle of a fixed home-consumption price was accepted as the most satisfactory method of achieving that end and complementary State and Federal legislation was passed to inaugurate a scheme of marketing control whereby the principle might be applied.

An outline of these measures, indicating the authorities to be constituted, and the administrative machinery devised to ensure that every wheat-grower might receive the home-consumption price for a uniform proportion of the wheat produced was given in the Official Year Book, 1934-35, at page 456.

It was found impracticable to implement the necessary legislation in time to admit of the plan being brought into operation covering the 1935-36 harvest. The Commonwealth Government, therefore, made provision for continuance of the flour tax of £2 12s. 6d. per ton by renewing the Act which expired on 7th January, 1936, and for assistance to wheatgrowers in similar manner to that adopted in previous sessions. The flour tax was lifted at midnight on 24th February, 1936.

A recent judgment by the Privy Council on the provisions of section 92 of the Commonwealth of Australia Constitution Act in relation to control of trade as between the States rendered the scheme incapable of application

in the present state of constitutional powers, and proposals for an amendment of the Constitution in order to validate marketing arrangements of this character were submitted to the electors on 6th March, 1937, but were rejected in every State of the Commonwealth. Details of the voting appear in the chapter "Government" of this Year Book at page 35. However, the recovery of wheat values obviated the necessity of assistance to wheat growers in respect of the 1936-37 crop.

### *World Production of Wheat.*

In the Northern Hemisphere wheat is harvested generally between the months of May and August, and crops are usually garnered in the Southern Hemisphere between November and January. In certain countries, notably the United States of America and the U.S.S.R., both winter sowing and spring sowing is practised in different areas. A comparison of world's wheat production during each of the six years ended 1935-36, and the average for the quinquennial period 1924-25 to 1928-29 is afforded in the appended table, compiled mainly from statistics published by the International Institute of Agriculture.

Country.	Annual Production of Wheat.						
	Average 1924-25 to 1928-29.	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36
Million Bushels.							
Europe—Exporting Countries* ...	345	445	462	281	455	337	386
Importing Countries ...	930	915	975	1,209	1,290	1,213	1,190
Total ...	1,275	1,360	1,437	1,490	1,745	1,550	1,576
North America—Canada ...	422	421	321	443	282	276	282
U.S.A. ...	826	886	942	757	552	526	626
Other Countries ...	11	15	15	14	15	16	15
Total ...	1,259	1,322	1,278	1,214	849	818	923
South America—Argentina ...	249	232	220	241	286	241	141
Other Countries ...	47	41	43	45	59	49	57
Total ...	296	273	263	286	345	290	198
Africa—North ...	100	106	117	129	114	136	115
South ...	8	9	14	11	10	17	21
Total ...	108	115	131	140	124	153	136
Asia—(Excluding U.S.S.R., China, Turkey, Iran and Iraq.) ...	385	456	407	393	422	431	452
U.S.S.R. ...	757	989	753	742	1,018	1,117	1,132
Oceania—Australia ...	144	214	191	214	177	133	144
New Zealand ...	7	7	6	11	9	7	9
Total ...	151	221	197	225	186	140	153
Total Exporting Countries— (Excluding U.S.S.R.) ...	2,410	2,675	2,579	2,380	2,225	2,000	2,057
(Including U.S.S.R.) ...	3,167	3,664	3,333	3,122	3,243	3,117	3,189
Total Importing Countries ...	1,064	1,072	1,133	1,368	1,446	1,382	1,381
Grand total of World† (including U.S.S.R.) ...	4,231	4,736	4,466	4,490	4,689	4,499	4,570

\* Excluding U.S.S.R.

† China, Turkey, Iran and Iraq are excluded.

Information published in previous issues of this Year Book disclosed that whilst a general increase in world production had taken place since pre-war years, by far the larger contribution to the increase in supplies originated in new areas in Canada, the United States and the Southern Hemisphere. This was due in part to the stimulus arising out of the Great War with European pre-occupation in other activities, and, in part, to the natural advantages enjoyed by the newer countries in producing wheat by large-scale enterprise in a world economy adapted to take advantage of the fruits of specialisation.

In the preceding table there is evidence of the altered conditions brought about by the endeavour of importing countries to supply an increasing proportion of their cereal requirements from internal resources, as particularly demonstrated in the case of Europe. The occurrence of an almost universally bounteous season in 1930 led to the garnering of more wheat than in any previous year. Production in the years 1933 to 1936 was comparatively large, and would have been even greater but for the ravages of drought and rust which greatly reduced North American harvests in those years.

#### *World Wheat Agreement.*

The circumstances surrounding the conclusion of the international wheat agreement at the World Economic Conference held in London in July, 1933, were outlined at page 723 of the Official Year Book, 1933-34.

The agreement provided for the creation of an International Wheat Advisory Committee and covered a period of two years ending 31st July, 1935, which has been extended to 31st July, 1938. The specific objects of the agreement are to adjust the supply of wheat to effective world demand, and to eliminate the abnormal surpluses which had accumulated and depressed the market since 1930. To that end, the exporting countries agreed upon export quotas based on an estimated world import demand of 560 million bushels during the period 1st August, 1933, to 31st July, 1934, and details respecting the operation of the agreement in that year were published at page 79 of the Year Book for 1932-33.

The importing countries that were signatories to the agreement undertook not to encourage any extension of the area sown to wheat, and not to take any governmental action the effect of which would be to increase the domestic production of wheat.

Although the principles of the Agreement were reaffirmed, its practical application is virtually in suspense. Progressive improvement in the world statistical position, mainly due to poor harvests in such major exporting countries as the United States of America, Canada, and in a degree, Australia, was probably an important factor in making a new quota arrangement less imperative, whilst failure of Argentina to conform to the Agreement in 1933-34 militated against the success of a new quota agreement. With the Argentine practically out of the market owing to the very poor 1935-36 harvest, and with exportable supplies limited elsewhere, saving in Canada, means to regulate the disposition of trade between exporting countries became unnecessary. Progressive decrease in surplus stocks in 1935-36 and 1936-37 has taken place and the major difficulties to meet which the agreement was concluded have been overcome, at least temporarily, by natural adjustment.

Stocks in Australia at 30th November, 1936, totalled about 8½ million bushels, or the smallest for ten years, representing what may be considered a very small carry-over for the Commonwealth, and a reduction of nearly 32 million bushels compared with that at 30th November, 1934.

The appended table, derived mainly from statistics of the International Institute of Agriculture, shows world production, trade and stocks of wheat in each of the last ten years. The table reveals the substantial progress made in the reduction of the surplus supplies which, in recent years, had depressed the market, but it is also apparent that, given even fairly favourable seasonal conditions, there is every likelihood of burdensome world surpluses being again accumulated:—

World Production, Trade and Stocks of Wheat.

Season.	World Production*.			Pro- duction in U.S.S.R.	World Exportable Supplies.		World Import Require- ments.	World Export- able End of Season Stocks.
	Importing Countries.	*Exporting Countries.	Total*.		Excluding U.S.S.R.	Including U.S.S.R.		
Millions of Bushels.								
1926-27 ...	999	2,397	3,396	914	961	1,010	831	170
1927-28 ...	1,077	2,534	3,611	797	1,057	1,060	816	248
1928-29 ...	1,077	2,849	3,926	807	1,376	1,376	923	447
1929-30 ...	1,223	2,242	3,465	694	1,051	1,061	628	434
1930-31 ...	1,072	2,675	3,747	989	1,211	1,324	826	499
1931-32 ...	1,133	2,579	3,712	753	1,266	1,331	809	523
1932-33 ...	1,368	2,380	3,748	742	1,236	1,253	629	625
1933-34 ...	1,446	2,225	3,671	1,018	1,088	1,123	546	577
1934-35 ...	1,382	2,000	3,382	1,117	909	911	532	376
1935-36† ...	1,381	2,057	3,438	1,132	696	725	503	190
1936-37‡ ...	1,195	2,165	3,360	.....	689	693	602	105

\* Excluding U.S.S.R., China, Turkey, Iran and Iraq.

† Subject to revision.

‡ Preliminary.

### MAIZE.

Until the closing decade of the last century, when the wheat-exporting industry began to develop, maize-growing was the most extensive single agricultural pursuit of New South Wales. During the next twenty years there was a slight increase in the cultivation of maize, and production attained its maximum in 1910-11. Thereafter, probably due in part to the sowing of pastures with lucerne and grasses of vigorous growth and high nutritive value, the production of maize steadily declined until, by 1930-31, the area sown with maize for grain was less than one-half, and the production little more than one-third that in 1910-11. The experience of maize-growing in New South Wales is illustrated in the graph published at page 564 of this issue. The following statement shows a comparison of the extent:

of maize-growing since the season 1900-01, with the total value and average value per acre for each crop:—

Season.	Area under Maize for Grain.	Production.		Farm Value of Crop.	
		Total.	Average yield per Acre.	Total.	Per Acre.
	acres.	bushels.	bushels.	£	£ s. d.
1900-01	206,051	6,293,000	30·5	839,032	4 0 6
1910-11	213,217	7,594,000	35·6	791,050	3 14 2
1915-16	154,130	3,774,000	24·5	723,270	4 13 10
1920-21	144,105	4,176,000	29·0	974,260	6 15 2
1925-26	120,955	3,278,000	27·1	805,820	6 13 3
1926-27	128,516	3,599,000	28·0	1,004,680	7 16 4
1927-28	148,801	3,930,570	26·4	622,330	4 3 8
1928-29	106,835	2,506,470	23·5	543,150	5 1 8
1929-30	108,219	3,035,850	28·1	758,960	7 0 8
1930-31	105,024	2,766,660	26·3	383,180	3 13 0
1931-32	106,047	2,669,580	25·2	417,120	3 18 8
1932-33	113,333	2,935,140	25·9	587,030	5 3 7
1933-34	117,231	3,133,890	26·7	339,490	2 17 11
1934-35	115,570	3,238,590	28·0	458,810	3 19 5
1935-36	119,849	3,324,780	27·7	644,180	5 7 6

The decline in the area sown with maize has been accompanied by a decrease in the average yield per acre. The average value per acre declined precipitately in 1930-31, and remained low in 1931-32, the price of maize being adversely affected by the low price of wheat. The area sown increased in 1932-33, and the price realised was 30 per cent. in advance of that of the previous year, but though area and harvest were each greater in 1933-34, prices were so low that the farm value of the crop was lower than for over forty years. More maize was produced in 1935-36 than in any of the seven preceding seasons and, with a substantial rise in prices, the average return per acre again increased, and was about 37½ per cent. above the average for the preceding five years.

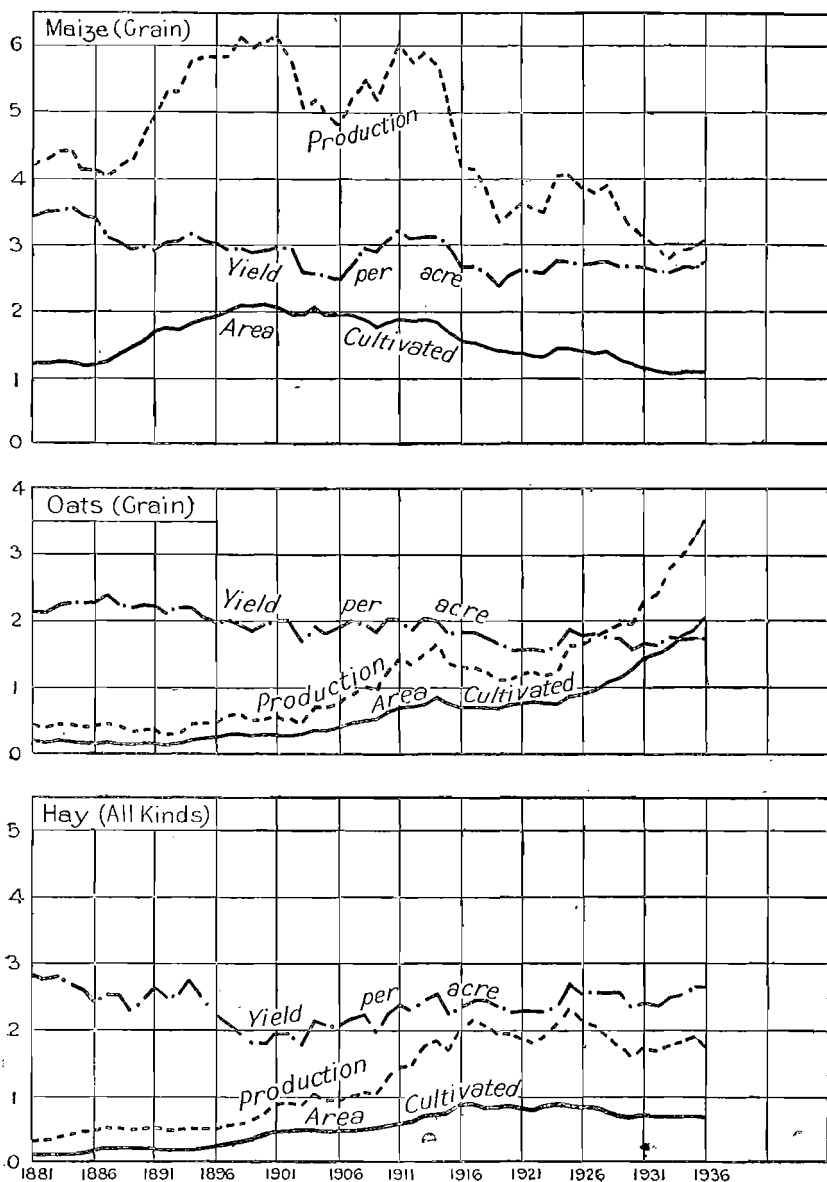
The average farm value of the maize crops of the last five years shown above was only £4 5s. 6d. per acre, which is below the average of £1 13s. for the quinquennium ending 1912.

Maize is cultivated chiefly in the valleys of the coastal rivers, where both soil and climate are peculiarly adapted to its growth. Good results are also obtained on the northern tablelands. The following statement shows the area under maize for grain in New South Wales during the seasons 1934-35 and 1935-36, with the production and average yield in each division:

Division.	1934-35.			1935-36.		
	Area under Maize for Grain.	Yield.		Area under Maize for Grain.	Yield.	
		Total.	Per Acre.		Total.	Per Acre.
Coastal—	acres.	bushels.	bushels.	acres.	bushels.	bushels.
North	43,524	1,379,691	31·7	47,545	1,447,032	30·4
Hunter and Manning	21,492	678,639	31·6	21,937	690,687	31·5
Metropolitan	1,637	76,461	46·7	1,403	54,978	39·2
South	9,131	296,247	32·4	9,820	379,599	38·7
Total	75,784	2,431,038	32·1	80,705	2,572,296	31·9
Tableland—						
Northern	19,053	337,743	17·7	18,969	372,057	19·6
Central	5,182	122,991	23·7	4,603	110,436	24·0
Southern	210	4,179	19·9	188	6,900	36·7
Total	24,445	464,913	19·0	23,760	489,393	20·6
Western Slopes	14,828	336,585	22·7	15,051	258,693	17·2
Central Plains, Riverina, and Western Division.	513	6,054	11·8	333	4,398	13·2
All Divisions	115,570	3,238,590	28·0	119,849	3,324,780	27·7

## PRINCIPAL CROPS OTHER THAN WHEAT.

Area, Production and Average Yield, 1881-1936.



The Graphs have been prepared on the basis of quinquennial averages ended in each year as shown.

The numbers at side of the graphs represent 100,000 of acres, millions of bushels of production, and tens of bushels of yield per acre in the case of maize and oats, and millions of acres, 500,000 of tons of production and tens of cwts. of yield per acre of hay.

The principal factors in the local supply of maize in recent seasons are shown in the following table. The particulars relate to calendar years, as the maize crops of the State are harvested between January and August. Complete records are not available of the interstate imports and exports, but it is considered that the quantity unrecorded is not large.

Calendar Year.	Production.	Import.		Export.		Available for Consumption. * †
		Oversea.	Interstate. †	Oversea.	Interstate. †	
	bus.	bus.	bus.	bus.	bus.	bus.
1924 ...	4,623,000	317,000	1,397,000	53,000	62,000	6,222,000
1925 ...	4,208,000	180,000	1,623,000	51,000	93,000	5,867,000
1926 ...	3,278,000	1,434,000	324,000	44,000	23,000	4,969,000
1927 ...	3,569,000	249,000	2,543,000	6,000	106,000	6,279,000
1928 ...	3,931,000	4,000	1,740,000	41,000	56,000	5,578,000
1929 ...	2,506,000	†	2,269,000	2,000	6,000	4,767,000
1930 ...	3,036,000	60,000	855,000	2,000	10,000	3,939,000
1931 ...	2,767,000	†	596,000	1,000	7,000	3,355,000
1932 ...	2,670,000	6,000	173,000	2,000	6,000	2,841,000
1933 ...	2,935,000	4,000	501,000	2,000	28,000	3,413,000
1934 ...	3,134,000	†	844,000	2,000	43,000	3,933,000
1935 ...	3,239,000	24,000	320,000	†	59,000	3,524,000
1936 ...	3,325,000	24,000	300,000	600	34,000	3,615,000

\* Subject to adjustment for carry over.

† Records of Interstate movement are incomplete.

‡ Negligible.

The annual requirement of maize is very variable, depending largely on the nature of the pastoral season and the price and size of available supplies. The large importation in 1927 and 1929 is attributed to the demand for fodder for sheep and other live stock during the acute though short drought. During 1935-36 droughty conditions in north-western pastoral areas of New South Wales necessitated hand-feeding of stock, and coinciding with a poor harvest in southern Queensland, lead to imports from South Africa to supplement the increased local production.

The imports interstate are derived almost exclusively from Queensland, while the imports oversea have been brought mostly from South Africa. A general duty of approximately 2s. per bushel and an *ad valorem* primage duty of 10 per cent. is imposed on maize imported from oversea. On maize from New Zealand and the United Kingdom the duty is approximately 1s. 5d. per bushel, together with an *ad valorem* primage duty of 5 per cent. in the case of the United Kingdom. Imports from New Zealand are not subject to primage duty. Duties payable are also subject to the Customs Tariff (Exchange Adjustment) Act, 1933-34.

## OATS.

Oats is sown in New South Wales mainly as a hay crop, the areas for respective purpose in 1935-36 being as follows:—Oats for hay, 328,866 acres; oats for grain, 279,622 acres; and oats for green food, 102,392 acres. The aggregate area—710,880 acres—was 52,257 acres in excess of the previous season and the greatest on record.

The elevated districts of Monaro, Goulburn, Bathurst, and New England contain large areas of land on which oats could be cultivated with excellent results, as it thrives best in regions which experience a winter of some severity.

The area sown with oats for grain has shown an upward trend since pre-war times, and especially so since 1927-28, so that the area so utilized in 1935-36 (279,622 acres) was more than twice the average for the years 1924-25 to 1928-29. The granting of assistance by the Commonwealth for artificial manuring, for which oats was an eligible crop, and a revival of horse-breeding, may have been factors in the recent expansion of the activity, but a more important influence has been the increasing attention given to stock raising, particularly fat lamb raising. Considerable areas of oats are being grown as a fodder crop for sheep, and with an improvement in grain quality as an outcome of plant breeding activities, local oats now find a ready market in the milling trade for human consumption. A graph illustrating the factors in the production of oats in New South Wales over the last 56 years appears at page 564 of this volume.

The principal divisions in respect of the cultivation of oats for grain in 1935-36 were the Riverina Division, with 116,983 acres producing 2,081,841 bushels, an average of 17.8 bushels per acre, the South-western Slopes, where 88,635 acres produced 1,630,458 bushels of grain, an average of 18.4 bushels per acre; Central-western Slopes, 31,071 acres producing 430,782 bushels, an average of 13.9; the Central Tableland with 15,992 acres producing 285,114 bushels, or an average of 17.8 bushels per acre; and the Central Plains, where 56,370 bushels were produced from 10,865 acres, averaging 5.2 bushels per acre. These five divisions between them produced 94 per cent. of the oats grown in the State.

The following table gives statistics of the cultivation of oats for grain in various years since 1900-01:—

Season.	Acres under Oats for Grain.	Production.		Farm Value of Oats for Grain.	
		Bushels.	Bushels per Acre.	Total.	Per Acre.
				£	£ s. d.
1900-01	29,383	593,548	20.2	59,355	2 0 6
1910-11	77,991	1,702,706	21.8	177,360	2 5 6
1915-16	58,636	1,345,698	23.0	173,820	2 19 3
1920-21	77,709	1,642,700	21.1	241,480	3 2 2
1925-26	101,097	1,615,650	16.0	381,790	3 15 6
1926-27	105,115	1,898,750	18.1	338,450	3 4 5
1927-28	114,988	1,654,560	14.4	324,010	2 16 4
1928-29	126,743	2,183,880	17.2	254,860	2 0 3
1929-30	181,354	2,528,610	13.9	316,080	1 14 10
1930-31	176,659	3,241,980	18.4	182,360	1 0 8
1931-32	151,600	2,526,450	16.7	126,320	0 16 8
1932-33	163,809	3,513,780	21.5	248,890	1 10 5
1933-34	203,693	3,178,470	15.6	291,370	1 8 7
1934-35	237,405	3,856,680	16.2	342,280	1 18 10
1935-36	279,622	4,735,740	16.9	394,630	1 8 3

Particulars of the production of oaten hay are given at page 571. The oats harvest of 1935-36 greatly exceeded that of any previous season, but prices, partly due to the abundant supply, were low, and the farm value per acre declined by about 27 per cent. in comparison with the preceding year, and was 45 per cent. below the average for the years 1925-26 to 1929-30.

The oats crop is harvested in December, and therefore constitutes the local element of supply for the calendar year following. The sources from which the local crop has been supplemented, and the quantity available for consumption in each of the past twelve years, is shown in the following table:—

Calendar Year.	Production.	Import.		Export, Oversea and Interstate.	Available for Consumption.†
		Oversea.	Interstate.‡		
	bus.	bus.	bus.	bus.	bus.
1925 ...	2,511,000	2,000	291,000	44,000	2,760,000
1926 ...	1,616,000	236,000	390,000	19,000	2,223,000
1927 ...	1,899,000	463,000	411,000	49,000	2,724,000
1928 ...	1,655,000	370,000	450,000	50,000	2,425,000
1929 ...	2,184,000	7,000	432,000	22,000	2,601,000
1930 ...	2,529,000	3,000	460,000	17,000	2,975,000
1931 ...	3,242,000	1,000	184,000	300,000	3,127,000
1932 ...	2,526,000	2,000	66,000	300,000	2,294,000
1933 ...	3,514,000	2,000	125,000	103,000	3,538,000
1934 ...	3,178,000	3,000	118,000	90,000	3,209,000
1935 ...	3,857,000	2,000	99,000	107,000	3,851,000
1936 ...	4,736,000	3,000	60,000	203,000	4,596,000

† Subject to adjustment for carry-over.

‡ Omitting considerable quantities imported interstate at Newcastle.

A duty of 1s. 6d. per cental, or approximately 7d. per bushel of 40 lb., is imposed on oats imported oversea, together with an *ad valorem* primage duty of 10 per cent., except in the case of New Zealand and the United Kingdom, oats from which carry no primage duty, and primage duty of 5 per cent. respectively. Duties payable are also subject to the Customs Tariff (Exchange Adjustment) Act, 1933-34. It is usual for practically the whole local supply to be produced in New South Wales and other Australian States. In the years 1926 to 1928 an appreciable part of the supply was obtained from other countries, mainly from New Zealand, but increased local production in recent years has been reflected in the dwindling of imports and in 1935-36 there was a net export of about 140,000 bushels.

At present the market for oats is chiefly in the metropolitan and Newcastle districts, and the demand is affected materially by the price of maize.

The local yield per acre is considerably below that of the important producing countries, and the total yield is insignificant compared with the world production, which usually amounts to more than 3,500,000,000 bushels per year.

#### BARLEY.

Barley is produced only on a moderate scale in New South Wales, and supplies for local consumption are imported from other States. Although there are several districts where the necessary conditions as to soil and drainage present inducements for cultivation, particularly with regard to the malting varieties, barley is grown mainly in the Western Slopes Divisions and in the Riverina. The areas under crop in other districts are

small and do not call for special notice. The following table shows the area under barley for grain, together with the production at intervals since 1900-01.

Season.	Area under Barley for Grain.	Production.		Season.	Area under Barley for Grain.	Production.	
		Total.	Average per Acre.			Total.	Average per Acre.
1900-01	acres.	bushels.	bushels.	1927-28	acres.	bushels.	bushels.
1910-11	9,435	114,228	12.1	1928-29	5,600	65,850	11.8
1915-16	7,082	82,005	11.6	1929-30	5,024	80,910	16.1
1920-21	6,369	114,846	18.0	1930-31	7,947	113,850	14.3
1921-22	5,969	123,290	20.7	1931-32	11,526	188,610	16.4
1922-23	5,031	83,950	16.7	1932-33	8,349	137,430	16.5
1923-24	3,899	55,520	14.3	1933-34	7,736	154,530	20.0
1924-25	4,357	71,910	16.5	1934-35	10,006	165,120	16.5
1925-26	6,638	118,300	17.8	1935-36	9,480	168,990	17.8
1926-27	6,614	105,150	15.9		11,583	214,860	18.5
	5,629	100,260	17.8				

Considerable fluctuation has occurred in the area cultivated, but there has been a material increase in area in the last six years. The grain yield has varied greatly, as the foregoing table indicates, while the average crop during the last ten years has been 16.8 bushels per acre. Both the area sown for grain and the harvest of grain in 1935-36 were greater than in any year since 1913-14, when the area of 20,610 acres and the yield of 303,447 bushels of barley each constituted a record.

Of the area cropped for grain in 1935-36, 7,066 acres yielded 138,180 bushels of malting barley, and 4,517 acres yielded 76,680 bushels of other barley. In addition, 930 acres were cropped for hay and 5,233 acres for green food.

Only a small proportion of the barley required for malting is produced in New South Wales, but in co-operation with the brewers a system of seed barley production was inaugurated in 1935-36 which may result in the production of malting barley being considerably increased.

### RICE.

Rice-growing trials were made intermittently in New South Wales and other Australian States from 1891 to 1922 with indifferent success, but in the latter year encouraging results were obtained from trials on the Murrumbidgee Irrigation Area, which remains the only area in the Commonwealth where rice is grown commercially. The history of the industry in its experimental stages is given at page 729 of the Official Year Book, 1933-34. Development was rapid in the five years ended 1929-30, but with production more than adequate to satisfy local demand, further expansion has been avoided since 1931-32 by fixing for each grower a maximum area which may be supplied with water for the irrigation of rice. The highest yield per acre yet recorded was obtained in 1933-34, and as a result the harvest in that year was larger than any previously garnered. The average yield of paddy rice has varied from slightly less than 70 bushels up to 107 bushels per acre, mainly owing to seasonal causes.

The progress in years since 1925-26 was as follows:—

Season.	Number of Growers.	Area Harvested.	Yield (Paddy Rice).	Farm Value of Yield.	Average per acre.	
					Yield (Paddy).	Farm Value.
		acres.	bus.*	£	bus.	£
1925-26 ...	30	1,556	61,100	12,030	39·21	7·7
1926-27 ...	67	3,958	214,740	48,320	54·27	12·2
1927-28 ...	127	9,891	879,113	181,320	88·88	18·3
1928-29 ...	221	14,027	1,307,520	201,850	93·21	14·4
1929-30 ...	258	19,780	1,829,173	289,620	92·48	14·6
1930-31 ...	270	19,825	1,427,413	259,610	72·00	13·1
1931-32 ...	277	19,574	1,349,653	263,180	68·95	13·4
1932-33 ...	280	22,032	1,901,440	304,820	86·30	13·8
1933-34 ...	292	20,221	2,171,520	337,600	107·39	16·7
1934-35 ...	290	21,738	1,888,430	336,080	86·87	15·5
1935-36 ...	304	21,705	2,163,520	354,620	99·68	16·3

\* 42 lb. per bushel.

In the earlier years the rice was purchased from growers by rice milling firms, who paid £10 10s., £12, and £11 10s. per ton (f.o.r., Leeton) for marketable paddy rice in successive years 1925-26 to 1927-28. Imposition of an import duty of 3s. 4d. per cental on uncleaned rice and 6s. per cental on cleaned rice was responsible for the higher price received by growers for the 1926-27 crop. Since 1928-29, rice grown in New South Wales has been marketed by a rice marketing board constituted under the Marketing of Primary Products Act, and the greater part of the rice produced has been sold for consumption in Australia at a fixed price of £11 per ton, f.o.r. Leeton. The quantity of marketable rice (paddy) produced, and the amounts of local rice shipped oversea in each year since 1928-29 are shown in the following statement:—

Season.				Marketable Rice Produced. (Paddy.)	Local Rice Exported Oversea.	
					Cleaned.	Uncleaned.
				cwt.	cwt.	cwt.
1928-29 ...	...	...	...	464,560	312	30
1929-30 ...	...	...	...	657,240	4,190	1,214
1930-31 ...	...	...	...	506,000	56,570	12,343
1931-32 ...	...	...	...	468,860	67,485	31,822
1932-33 ...	...	...	...	699,220	37,272	20,489
1933-34 ...	...	...	...	798,760	132,059	508
1934-35 ...	...	...	...	698,280	148,775	20,075
1935-36 ...	...	...	...	783,620	145,579	993

Excluding the quantity used for seed, the consumption of rice in New South Wales is about 4½ lb. per head of population. Thus it would appear that the annual requirement is approximately 104,500 cwt. of commercial rice, equivalent to approximately 450,000 bushels (42 lb.) of "paddy" rice as harvested by the grower. It is possible, however, that if local rice can be produced in regular supply at a price attractive to consumers, the local demand may be increased. The annual quantity of paddy rice required for consumption in Australia was estimated by the Rice Marketing Board at between 400,000 and 440,000 cwt., and production in recent years has more than satisfied domestic requirements.

The volume of oversea trade of New South Wales in rice in 1923-24 and each of the past ten years is shown below.

Year ended June.	Import oversea.				Export oversea.			
	Cleaned or partly cleaned.		Uncleaned.*		Cleaned.		Uncleaned.*	
	cwt.	£	cwt.	£	cwt.	£	cwt.	£
1923-24 ...	257,364	204,432	131,156	90,725	89,741	94,702	...	...
1926-27 ...	129,191	103,814	123,899	77,215	59,385	60,564	29	32
1927-28 ...	77,953	66,192	10,450	6,739	44,580	47,131	...	...
1928-29 ...	57,227	51,211	6	6	53,771	54,877	30	35
1929-30 ...	74,222	60,867	3,088	2,126	62,145	62,283	1,214	1,152
1930-31 ...	28,251	18,376	10	10	80,155	58,144	12,343	4,330
1931-32 ...	25,788	14,053	...	...	76,904	49,585	31,822	11,280
1932-33 ...	29,712	12,990	...	...	63,675	46,716	20,489	7,670
1933-34 ...	27,001	9,851	...	...	148,012	98,627	508	308
1934-35 ...	24,438	10,381	...	...	164,242	107,230	20,075	7,735
1935-36 ...	26,513	11,623	20	25	162,829	125,124	993	609

\* Stated to be after removal of husks, involving loss of from 16 to 20 per cent. of weight of "paddy" rice.

In the evidence submitted to the Tariff Board at an investigation conducted in 1926 it was estimated that there were approximately 53,000 acres of land suitable for rice growing on the Murrumbidgee Irrigation Area, and that ultimately 40,000 acres would be used for the purpose, 20,000 acres being cropped annually with one year's fallow.

Each year, however, a conference representing the Rice Marketing Board, the rice growers, the Department of Agriculture, and the Water Conservation and Irrigation Commission, fixes for the following season the maximum area each grower may plant. For the season 1931-32 the limit was 90 acres. In the following season the area was increased to 110 acres, in order to compensate for the reduced yields that would be obtained from previously cropped land. In each season since 1933-34 the area has been fixed at 80 acres.

A rice research station is maintained at Yanco by the Department of Agriculture.

#### HAY.

The production of wheaten and oaten hay varies in accordance with the seasonal factors controlling yield, the prospects for grain crops and the market demand for hay. In favourable years considerable stocks are stacked for use in dry seasons. The production of lucerne hay, though subject to considerable fluctuation, is more constant than that of wheaten and oaten hay. Changes in the proportions of wheaten and oaten hay since 1931-32 may be attributable to the Federal bounty on manures used in cultivation, for which wheat for grain was not an eligible crop, in consequence of which the tendency to sow wheat and ultimately to use for hay or for grain according to circumstances may have been discouraged, particularly in

view of the eligibility of wheat (grain) for bounty payments. The following table shows the production of hay in each of the last six years (ended 31st March):—

Kind of Hay.	1930-31.*	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	tons.	tons.	tons.	tons.	tons.	tons.
Wheaten ...	677,657	375,632	396,426	385,488	342,135	266,956
Oaten ...	370,158	279,530	346,436	309,533	434,011	396,706
Lucerne ...	141,694	154,394	164,141	223,454	225,786	171,498
Other ...	2,187	1,687	1,928	2,005	2,829	2,226
Total...	1,191,696	811,243	908,931	920,480	1,004,761	837,386

\* Year ended 30th June.

Information as to the quantity of hay on hand on rural holdings was ascertained, for the first time, in 1935-36 when there was an aggregate of 744,930 tons stored on 16,132 holdings.

#### SILAGE.

New South Wales is liable at intervals to fairly regular recurrence of long periods of dry weather. Consequently it lacks a permanent supply of natural fodder, and the necessity arises for conserving the abundant growth of herbage of good seasons, in the form of silage, for use when natural pastures are exhausted. To facilitate such conservation the Department of Agriculture offers free advice concerning material and method of constructing silos. Farmers may sink pits for the same purpose at small expense.

The possession of stocks of silage is highly advantageous to the prosecution of dairy-farming in the districts of the coast, where the climatic conditions are unfavorable to the growth of winter fodder.

Returns showing the stocks of ensilage on holdings as at 31st March were obtained for the first time in 1936. At that date ensilage totalling 206,190 tons was stored on 1,671 holdings. In the coastal divisions there were 758 holdings with 62,109 tons; on the Tablelands, 155 holdings with 22,831 tons; on the Western Slopes, 588 holdings with 90,692 tons; on the Western Plains and Riverina, 167 holdings with 29,749 tons, and in the Western Division, three holdings storing 809 tons.

The following table gives particulars of the silage made in districts for each of the last thirteen years:—

Year.	Farms on which Made.	Silage Made.	Value of Silage.	Silage made in Districts.				
				Coastal.	Tablelands.	Western Slopes.	Plains and Riverina.	Western Division.
	No.	tons.	£	tons.	tons.	tons.	tons.	tons.
1923-24 ...	152	19,292	34,823	13,508	1,113	3,009	1,162	500
1924-25 ...	269	35,145	63,610	13,972	7,215	11,395	2,412	151
1925-26 ...	241	30,457	53,212	11,461	6,387	11,241	1,368	...
1926-27 ...	407	48,718	97,312	14,498	4,782	25,191	3,769	478
1927-28 ...	473	50,464	87,090	25,300	6,700	9,789	8,012	663
1928-29 ...	350	27,177	55,740	10,424	2,208	12,649	1,896	...
1929-30 ...	338	28,155	51,102	19,553	1,813	4,186	2,603	...
1930-31 ...	669	60,172	86,815	26,576	4,646	23,505	5,320	125
1931-32 ...	628	54,885	77,078	27,644	3,723	15,267	7,901	350
1932-33 ...	738	62,435	88,309	31,996	7,715	13,741	8,983	...
1933-34 ...	892	70,835	96,000	44,433	4,357	18,159	2,386	1,500
1934-35 ...	1,068	88,991	125,010	51,343	7,882	23,119	4,347	2,300
1935-36 ...	1,311	109,731	149,886	77,131	7,452	18,513	5,135	1,500

Considering the liability of the State to periods of severe drought, the small efforts made to conserve the fodder of abundant seasons were disappointing. Latterly, however, there has been a considerable increase and active propaganda by Departmental officers and farmer organisations suggest the likelihood of much greater attention being given this important aspect of animal husbandry. Schemes of fodder conservation as insurance against drought have been considered from time to time, but no organised project has yet been initiated.

#### GRAPES.

Between 1920 and 1924 there was rapid expansion in the area devoted to grape-growing in New South Wales, which was largely due to the establishment of the industry on the Murrumbidgee and Cullwaa Irrigation Areas and to the settlement of returned soldiers on agricultural holdings adapted to grape-growing.

The most important viticultural district was formerly in the Hunter and Manning Division, the area cultivated for grapes in that division in 1935-36 being 1,493 acres for wine-making, 225 acres for table use, and 66 acres of young vines. However, the area cultivated for grapes is now largest in the Riverina Division, where 5,128 acres were grown in 1935-36 for wine-making, 759 acres for table use, 1,691 acres for drying, and 641 acres of young vines. The greater part of these areas is in the Murrumbidgee Irrigation Area.

The following dissection of the total area cultivated for grapes shows that the greatest increase in area, relatively and absolutely, has been in grapes of drying varieties.

Varieties of Grapes.				1920-21.*	1925-26.*	1930-31.*	1933-34.†	1934-35.†	1935-36.†
				acres.	acres.	acres.	acres.	acres.	acres.
Table ... ..				2,087	2,464	2,637	2,002	3,065	2,932
Drying ... ..				699	2,298	3,937	4,114	4,063	3,840
Wine ... ..				4,589	6,977	6,771	7,097	7,041	7,382
Total, bearing				7,375	11,739	13,345	14,203	14,169	14,154
Not bearing ...	{	Wine		3,408	2,726	1,269	524	517	514
		Other				749	516	457	490
Grand Total				10,783	14,465	15,363	15,243	15,143	15,158

\* Year ended 30th June.

† Year ended 31st March.

The production of the vineyards according to the purposes for which it was used is shown in the following comparison. The quantities do not relate in every case to the acreages as classified in the preceding table, as the produce of some varieties of vines cultivated usually for a particular purpose may be used ultimately in a different way:—

Production.	1920-21.*	1925-26.*	1930-31.*	1933-34.†	1934-35.†	1935-36.†
Table grapes ... cwt.	53,200	76,740	73,600	89,380	72,760	87,520
Dried grapes—						
Sultanas ... ..	3,396	19,386	43,304	73,195	62,614	76,112
Currants ... ..	2,469	6,132	8,506	14,417	15,096	17,281
Raisins & lexias ..	1,052	3,782	3,983	5,239	5,002	7,046
† Grapes used for wine,	113,880	203,940	235,040	302,180	271,160	327,020
Wine made ... gal.	674,188	1,240,893	1,335,882	1,813,034	1,539,274	2,567,812
Vigneron's Brandy and Spirit ... ..	8,536	9,037	7,764	16,353	10,697	36,710

\* Year ended 30th June.

† Year ended 31st March.

‡ Includes grapes sent to Victoria to be made into wine; 16,860 cwt. in 1930-31; 23,220 cwt. in 1932-33; 24,400 cwt. in 1933-34; and 8,840 cwt. in 1935-36.

The volume of output shows some variation in accordance with the effect of seasonal conditions on average yields. The decline in production in 1933-34 and 1934-35 is explained by ravages of the disease "black spot" in 1934 and to the damage to vines caused by an exceptionally severe late Spring frost which materially affected both the quality and quantity of drying grapes produced on the Murrumbidgee Irrigation Area in 1935. Heavy yields on the Irrigation Areas in 1936 were partly offset by poor crops in the Hunter River districts due to the dry season. The most striking feature of the table is the rapid increase in the production of both sultanas and currants.

The approximate quantities of dried grapes packed in the 1935 season were sultanas 62,600 cwt., currants 15,100 cwt., raisins and lexias 5,000 cwt.

Further information relating to the development of the dried vine fruits industry will be found on page        of this issue.

Particulars of the production from vineyards in irrigation areas are shown in the section "Water Conservation and Irrigation" of this Year Book.

The urban centres of the State absorb most of the table grapes marketed, but in 1935-36 grapes to the weight of 7,831,000 lb. valued at £15,014 were exported from New South Wales. Special research into the problems of transport have been undertaken. The principal destinations of grape exports in 1935-36 were, in order of importance, British Malaya, Hong Kong, Canada, Indo-China and the Netherlands East Indies.

The export trade in wine is assisted by a bounty payable by the Commonwealth Government on fortified wine exported overseas. Particulars of the rates at which bounty has been payable under the Wine Export Bounty Act, 1924, the quantities on which bounty was paid and the amounts disbursed in New South Wales since passage of that Act are as follow:—

Year ended June.	Bounty on Fortified Wine Exported.		Wine Exported on which Bounty was Paid.†	Amount of Bounty Paid.
	Rate.	As from—		
	s. d. per gal.		gallons.	£
1924-25    ...    ...    ...	4   0	1 Sept., 1924...	29,538	5,908
1925-26    ...    ...    ...	4   0	.....	163,043	32,609
1926-27    ...    ...    ...	1   9	1 Sept., 1927...	247,858	49,572
1927-28    ...    ...    ...	1   0*	8 Mar., 1928...	168,213	30,330
1928-29    ...    ...    ...	1   0*	.....	31,206	1,784
1929-30    ...    ...    ...	1   9	13 Mar., 1930...	25,295	1,795
1930-31    ...    ...    ...	1   9	.....	33,267	2,821
1931-32    ...    ...    ...	1   4·8	20 July, 1931...	74,284	5,474
1932-33    ...    ...    ...	1   4·8†	.....	88,839	7,382
1933-34    ...    ...    ...	1   4·8	.....	75,260	5,268
1934-35    ...    ...    ...	1   3	1 Mar., 1935...	49,761	3,232
1935-36    ...    ...    ...	1   3	.....	43,959	2,748

\* On wine exported to Canada for Canadian consumption—1s. 9d.

† Actual rate paid 5th October, 1932, to 30th June, 1933—1s. 4·2d.

‡ Not necessarily the produce of New South Wales.

The rate of bounty was fixed at 1s. 3d. per gallon from 1st March, 1935, to 28th February, 1937.

There is a Wine Grapes Marketing Board, constituted under the Marketing Act, which functions mainly as a negotiating body between the growers and the wine-makers, fixing prices at which the growers may deliver wine-grapes to the wineries.

## FRUIT AND VEGETABLE GROWING.

In 1935-36 the area of land on which fruit (including passion-fruit, berry fruits, grapes, bananas and pineapples), was grown was 97,823 (inclusive of 14,768 non-bearing) acres, and the farm value of production therefrom £2,072,160, compared with an area of 102,176 (inclusive of 17,331 non-bearing) acres and a farm value of £1,837,910 in 1934-35.

The importance of fruit and vegetable growing as industries is shown by the following comparison, which relates to the area and value of production of each of the principal classes of crop on holdings of one acre and upwards in extent:—

Kind of Crops.	1934-35.			1935-36.		
	Area not yet Bearing.	Area in Bearing.	Farm Value of Crop.	Area not yet Bearing.	Area in Bearing.	Farm Value of Crop.
	Acres.	Acres.	£	Acres.	Acres.	£
Orchards—Citrus ...	4,401	25,334	496,400	3,938	24,284	584,660
Other† ...	7,740	32,318	727,050	8,328	32,030	787,090
Total	12,141	57,652	1,223,450	12,266	56,314	1,371,750
Vineyards ... ..	974	14,169	273,770	1,004	14,154	339,480*
Market Gardens ...	...	6,696	336,670	...	7,026	349,260
Separate Root Crops ...	..	21,633	343,920	...	25,686	432,840
Minor Crops of Fruit and Vegetables ..	4,216	31,778	628,980	1,529	34,299	702,310
Grand Total ...	17,331	131,928	2,806,790	14,799	137,479	3,195,640

\* Includes value of wine and spirit made from grape juice.

pineapples, and berry fruits.

† Excludes passion-fruit, bananas.

The cultivation of many classes of fruit is capable of considerable expansion, and as there exist large areas of suitable soil with climatic conditions ranging from comparative cold on the highlands to semi-tropical heat on the North Coast, a large variety of fruits can be cultivated. In the vicinity of Sydney, citrus fruits, peaches, plums, apples, and passion-fruit are most generally planted. On the tablelands, apples, pears, apricots, and all the fruits from cool and temperate climates thrive well; in the west and in the south-west, citrus, pome and stone fruits, figs, almonds, and raisin-grapes are cultivated; and in the north coastal districts, bananas, pineapples, and other tropical fruits are grown. Citrus fruits are cultivated extensively, and form the largest element in local fruit production. All orchards and nurseries outside the metropolitan area are required to be registered, for which an annual charge of 1s. per acre or part thereof is imposed. Revenue from this source, less the cost of administration, is expended in the form of advances to fruit-growers' organisations for the benefit of the industry.

With the exception of oranges, lemons, mandarins and bananas, the fruit production of New South Wales is far below the demand. In the year ended 30th June, 1937, approximately 1,800,000 cases of fresh fruit were imported into New South Wales from other States. The quantity of fruit used for jam and fruit-canning in factories in New South Wales during 1935-36 was 14,980 tons, valued at £168,527. Fresh fruit (other than citrus) to the value of £105,786 was exported overseas from New South Wales in 1935-36, in addition to preserved fruit and vegetables, pulp and juice of local origin valued at £194,114, and dried fruits of local origin valued at £54,708. Good seasons generally produce a glut of stone fruits, for which apparently there is no system of efficient handling.

The extent of cultivation of each important class of fruit on holdings of 1 acre and upwards during the past season is shown in comparison with that in 1930-31 in the following table:—

Fruit.	1930-31.				1935-36.			
	Number of Trees not yet Bearing.	Trees of Bearing Age.		Number of Trees not yet Bearing.	Trees of Bearing Age.			
		Number.	Yield.		Number.	Yield.		
Oranges-			bushels.				bushels.	
Seville ... ..	4,905	33,872	38,727	3,851	25,406	33,158		
Washington Navel ...	158,380	551,616	746,916	120,695	614,916	839,712		
Valencia ... ..	234,560	719,441	854,073	130,664	788 660	1,030,460		
All other ... ..	34,176	391,251	407,069	13,043	214,450	257,248		
Total oranges ...	432,021	1,696,180	2,046,785	268,253	1,643,432	2,160,578		
Lemons ... ..	53,350	210,833	320,156	61,840	195,880	241,430		
Mandarins ... ..	100,184	589,839	532,568	22,820	404,647	378,689		
Other Citrus ... ..	14,919	27,942	36,219	20,900	35,126	45,587		
Apples ... ..	323,802	967,164	908,705	432,663	1,048,555	977,901		
Pears—								
Williams ... ..	23,240	159,640	172,009	20,862	142,865	206,731		
All other ... ..	22,374	141,972	141,961	22,741	138,669	189,496		
Peaches —								
Dessert and Drying ..	54,166	302,688	214,600	65,091	280,059	251,903		
Canning ... ..	55,685	171,127	203,998	80,563	178,711	301,563		
Nectarines... ..	7 746	32,142	19,403	10,923	35,461	28,880		
Plums ... ..	37,559	207,631	143,246	31,154	199,337	134,942		
Prunes ... ..	21,616	272,553	197,998	5,982	235,009	165,600		
Figs ... ..	6,002	8,629	4,233	2,803	18,393	8,659		
Cherries ... ..	78,331	241,724	79,220	58,330	268,805	141,688		
Apricots ... ..	16,156	147,789	113,303	18,996	142,975	208,289		
Quinces ... ..	9,92	15,960	19,989	7,200	33,665	42,777		
Almonds ... ..	9,031	35,898	4,410	18,017	43,756	4,955		
Persimmons ... ..	757	9,149	5,920	1,453	12,551	10,768		
Passion Fruit ... ..	†73,369	†203,035	57,595	†90,825	†155,336	29,832		
†All other ... ..	...	...	5,642	...	...	6,487		
	† Vines.	† Excluding bananas and pineapples.						

† Vines.

‡ Excluding bananas and pineapples.

The figures shown above include returns from non-commercial orchards, which are, however, of comparatively small extent. In the last quinquennium there has been a check to the growth of orcharding which had been steadily maintained throughout the preceding decade. This is well illustrated by a comparison of the figures relating to young trees as well as the decline in trees in bearing. Cherries, and certain fruits used mainly for processing are exceptions to the general trend. A marked decline in mandarin growing and a definite shift from common oranges to Washington navels and Valencias are features of the table.

*Citrus Fruits.*

Particulars of citrus orchards are shown in the following statement:—

Season.	Area under Cultivation (Citrus Fruits.)			Production.		Farm Value of Production.	
	Productive.	Not bearing.	Total.	Total.	Average per Productive Acre.	Total.	Average per Productive Acre.
	acres.	acres.	acres.	bushels.	bushels.	£	£ s. d.
1900-01	11,013	3,952	14,965	648,628	59	81,080	7 7 3
1910-11	17,465	2,643	20,108	1,478,306	85	199,300	11 8 3
1920-21	21,990	6,445	28,435	2,009,756	91	477,580	21 14 4
1922-23	20,412	8,036	28,448	1,984,707	97	628,100	30 5 8
1923-24	20,733	8,971	29,704	2,004,020	97	521,730	25 3 4
1924-25	22,709	9,284	31,993	2,292,062	101	609,420	26 16 9
1925-26	23,425	7,860	31,285	2,486,020	106	742,650	31 14 1
1926-27	23,853	7,854	31,707	2,273,529	95	762,360	31 19 2
1927-28	26,056	7,301	33,357	2,604,983	100	765,240	29 7 5
1928-29	26,366	6,889	33,255	3,031,820	115	913,110	34 12 8
1929-30	27,263	6,747	34,010	2,541,681	93	1,176,400	43 3 0
1930-31	27,161	6,303	33,464	2,935,728	108	515,160	18 19 4
1931-32	26,758	5,508	32,266	3,050,447	114	562,700	21 0 7
1932-33	27,235	5,290	32,525	2,909,142	107	570,510	20 18 11
1933-34	27,504	4,894	32,398	2,968,021	109	574,960	20 18 1
1934-35	25,334	4,401	29,735	3,043,444	120	496,400	19 11 11
1935-36	24,284	3,938	28,222	2,826,284	116	584,660	24 1 6

The principal divisions for the cultivation of citrus fruits are as follow:— Hunter and Manning, 7,861 acres; Metropolitan, 7,393 acres; Riverina (which includes 5,775 acres within the Murrumbidgee Irrigation Area), 6,970 acres, and Central Tableland, 4,132 acres. Of the latter, 3,951 acres within Colo Shire are really within the coastal terrain.

The number of holdings of one acre or more in extent in which citrus fruit, to the extent of fifty trees or more, was cultivated during the year 1935-36 was 3,997, and of these the average area was 7.1 acres, compared with 5,110 in 1930-31, with an average area of 6.7 acres. The area devoted to citrus culture steadily expanded in the ten years ended 1929-30, when the maximum area of 34,010 acres of bearing and non-bearing trees was attained. Since then, owing to the adversities of the industry, citrus growing has been curtailed, and in 1935-36 the area under citrus fruits was nearly 16 per cent. smaller than in 1930-31 with the productive area reduced by about 11 per cent. Simultaneously the areas under lemons and mandarins have progressively declined, and navel and Valencias have, to an appreciable degree, replaced oranges of other varieties. Lemon growing, however, was slightly more extensive in 1935-36 than in the preceding year.

The production of oranges and lemons has attained such proportions that the growers are obliged to seek oversea markets. During 1934-35 the oversea export of citrus fruit from New South Wales was valued at £88,167, and in 1935-36 at £28,342. Formerly most of this export was to New Zealand. But in December, 1932, the Dominion placed an embargo on importation into New Zealand of all fresh fruits from Australia. This was partially relaxed in respect of the produce of South Australia only, in August, 1933. This embargo coupled with increased local production seriously affected the local markets. Efforts to develop markets in Canada and Great Britain have met with some success, though prices secured in oversea markets have not been very satisfactory, and a bounty of 6d. per export case was paid by the Commonwealth on oranges exported to countries other than New Zealand in 1934 and 2s. per case in 1935 and 1936 subject to certain qualifications. In 1935-36, 24,993 centals of citrus fruits valued at £20,570 were exported to the United Kingdom and 1,622 centals (£1,615) to Canada.

Late in 1936 the New Zealand embargo was relaxed to permit of imports from "fly free" areas in New South Wales and Victoria and under this arrangement 9,892 cases were shipped from this State. It has also been announced that oranges from "fly free" areas will be admitted to meet the needs of the New Zealand market between December, 1937, and April, 1938.

Australian oranges shipped to the United Kingdom arrive mainly in the months August to November and then compete in the British market with oranges from South Africa, Brazil, and at times the United States of America. Production has expanded rapidly in South Africa and Brazil, in which countries the producers enjoy the advantages of cheap labour and more ready access to market. Hence the Australian producer, as a relatively small factor in the total British supply even in these months of active marketing, is at the mercy of uncertain prices, and can hope to secure remunerative returns from exports to the United Kingdom only if costs of production and marketing are kept at a very low level.

The New Zealand embargo deprived mandarin growers of their only important export market. To relieve distress amongst such growers the Commonwealth and State Governments each provided an amount of £8,515, grants to growers to be used for re-soiling, purchase of fertilisers, reworking of established mandarin trees with approved citrus varieties, replacement of old mandarin trees with other fruit trees, and utilization of areas which were under mandarins for any other approved purpose. Mandarin trees in bearing decreased in number from 590,578 in 1931-32 to 404,647 in 1935-36.

A system of packing and marketing inaugurated by the Central Citrus Association was described on page 602 of the Year Book for 1928-29, but this organisation ceased to function in December, 1931, a considerable proportion of the packing sheds having been closed.

In February, 1935, the Commonwealth Government made available to the Council for Scientific and Industrial Research an annual grant of £2,000 for five years to be expended in citrus research.

*Fruits other than Citrus.*

The following table shows the area of orchards and fruit gardens, including passion fruit but exclusive of citrus orchards, bananas, pineapples, and berry fruits, together with the total value of each season's yield, at intervals since 1900-01:—

Season.	Area under Cultivation (Fruits other than Citrus).			Farm Value of Production.	
	Productive.	Not Bearing.	Total.	Total.	Average per Productive Acre.
	acres.	acres.	acres.	£	£ s. d.
1900-01	25,766	5,503	31,269	270,080	10 9 8
1910-11	20,498	6,748	27,246	271,930	13 5 4
1920-21	27,302	14,309	41,611	577,480	21 3 0
1921-22	27,838	14,031	41,869	547,950	19 13 8
1922-23	26,314	11,500	40,814	732,390	27 16 8
1923-24	27,220	13,525	40,745	645,820	23 14 6
1924-25	27,694	12,679	40,373	796,390	28 15 2
1925-26	29,621	11,818	41,439	857,380	28 18 11
1926-27	30,403	10,637	41,040	855,540	28 2 7
1927-28	32,492	9,038	41,530	957,550	29 9 6
1928-29	32,323	8,389	40,712	860,710	26 12 7
1929-30	32,284	7,767	40,051	1,006,640	31 3 7
1930-31	32,110	7,499	39,609	709,360	22 1 5
1931-32	32,811	7,536	40,347	461,210	14 1 1
1932-33	32,954	7,014	39,968	903,690	27 8 5
1932-34	32,811	7,398	40,209	600,560	20 8 9
1934-35	33,002	8,016	41,018	753,810	22 16 10
1935-36	32,594	8,600	41,194	809,960	24 17 0

Approximately one-quarter of the area under fruits other than citrus is situated in the Central Tablelands, where the area occupied in this way is 10,587 acres; 8,490 acres are situated in the south-western slopes and 8,389 acres in the Riverina, which includes the Murrumbidgee Irrigation Area, particulars of fruitgrowing on which area are given in the chapter "Water Conservation and Irrigation."

The number of non-citrus fruit trees (in bearing) of each of the principal varieties in various years since 1910 are shown in the following table.

Whilst the area under fruits other than citrus has varied but little during the past fifteen years, apple and cherry growing has tended to expand in recent years, and a tendency for fewer pears, peaches, and plums to be grown has been noticeable. Prune growing extended rapidly between 1920 and 1930, but has been declining over the past three years.

Season.	Apples.	Pears.	Peaches.	Plums.	Prunes.	Apricots.	Cherries.
Number of Trees of Productive Age.							
1910	476,945	109,178	584,642*	110,791†	...	78,352	114,205
1920	718,350	196,943	690,617	132,385	32,857	109,088	139,212
1925-26	832,110	271,526	568,291	212,721	131,153	134,782	186,925
1930-31	967,164	301,612	473,815	207,631	272,553	147,789	241,724
1931-32	985,226	302,318	465,551	202,101	267,901	148,203	243,689
1932-33	1,015,948	297,445	453,333	204,781	272,893	143,198	251,251
1933-34	1,012,254	290,526	451,228	206,733	263,279	141,983	259,125
1934-35	1,045,824	281,902	451,011	200,989	259,948	143,792	261,359
1935-36	1,048,555	281,534	458,800	199,337	235,009	142,975	268,805

\*Including Nectarines.

† Including Prunes.

*Apples and Pears.*

Apples are by far the most important non-citrus fruit grown. Apple orchards are most extensive in the Central Tableland division in the Bathurst and Orange districts, in the south-western slopes near Batlow and Tumbarumba, in the Northern Tableland near Uralla, and in the Murrumbidgee Irrigation Area. Of 977,901 bushels of apples picked in 1935-36 about 31.3 per cent. (305,710 bushels) were grown in the Central Tablelands division, 193,425 bushels in the South-western Slopes, 107,848 bushels in the Northern Tableland and 128,440 bushels in the Murrumbidgee Irrigation Area. Pears are also grown in these districts.

Apart from citrus fruits, apples and pears are the only fresh fruits grown in New South Wales which are exported in considerable quantities. Low prices and marketing difficulties, both locally and abroad, jeopardised the livelihood of apple and pear growers in common with orchardists generally throughout the depression and the Commonwealth Government appropriated £125,000 in each year, 1933-34 and 1934-35, for the relief of apple and pear growers, of which £8,225 and £4,023 was distributed to orchardists in New South Wales in the respective years. Further assistance has been given in the form of a bounty paid on apples and pears exported at the rate of 4d. per bushel case in 1935 and 4½d. per bushel case in 1936. In 1935-36 a grant of £1,270 was made by the Commonwealth for expenditure toward the improvement of the apple and pear growing industries.

A comparative statement relating the production and oversea export of apples and pears is appended. In this table the quantities exported (recorded in centals) have been converted at the rate of 40 lb. to the bushel for apples and 50 lb. to the bushel for pears. It will be noted that the United Kingdom is the principal market for apples and pears shipped from the State. Quantities are also exported to Hong Kong, Malaya, the Netherlands East Indies and Germany.

Year.	Apples.				Pears.			
	Production.	Quantity Exported.		Total Value of Exports.	Production.	Quantity Exported.		Total Value of Exports.
		To United Kingdom.	Total.			To United Kingdom.	Total.	
	bus.	bus.	bus.	£	bus.	bus.	bus.	£
1910 ...	474,838	1,360	28,515	8,580	128,168	*	*	*
1920-21 ...	524,303	7,093	19,660	10,568	165,641	*	*	*
1925-26 ...	759,742	*9,613	22,288	12,454	278,539	2,376	4,842	4,414
1930-31 ...	908,705	45,223	76,718	33,316	313,970	3,282	12,746	6,672
1931-32 ...	295,288†	78	25,235	14,863	161,469†	...	4,386	3,283
1932-33 ...	1,251,815	336,720	375,873	139,479	336,300	30,942	35,826	13,592
1933-34 ...	838,020	74,815	131,435	53,996	358,479	25,144	38,456	17,021
1934-35 ...	1,235,389	192,890	264,400	113,178	333,905	12,630	24,412	12,068
1935-36 ...	977,901	104,488	148,925	62,656	396,227	15,844	27,006	15,128

\* Not available.

† Poor crops due to thrip ravages.

In recent years headway has been made in organising the marketing of non-citrus fruits. An efficient cool store on co-operative lines has operated at Batlow for ten years, and similar stores have been established at Orange, Young, Leeton, Griffith, and Kentucky. These provide growers with storage chambers which enable them to store apples, pears, etc., during periods of plenty, for sale when supplies are scarce by reason of seasonal changes. In

addition to the monetary gain, this system makes it possible for suppliers to ensure greater regularity of supplies of fruit, to make valuable trading connections, and to inaugurate sound marketing undertakings.

1911.

### Bananas.

There was rapid progress of banana culture in the Tweed River district of the North Coast division between 1914 and 1920. But infection of plantations by the disease known as "bunchy top" almost extinguished the industry, and it was not until 1930 that control measures evolved by the Bunchy-top Control Board described at page 599 of the 1933-34 edition of this Year Book) permitted of renewed expansion. Between 1929-30 and 1933-34 development was so marked that in the latter year the area devoted to banana culture was more than threefold that in 1922. Apart from the enhanced prospects of successful culture due to bunchy-top control the renewed expansion of the industry was probably attributable in large measure to the influx of unemployed persons; the small area needed; and the fact that labour is the preponderating item of cost in the establishment of plantations, enabling men to undertake the work whilst receiving relief or employed intermittently.

The industry has attained such proportions that local requirements are satisfied largely from within the State, and plentiful supplies have seriously depressed prices. A Banana Market Board was constituted under the provisions of the Marketing Act of 5th July, 1935, and five producers' representatives were elected at a poll of the growers in August, 1935. The Board adopted full marketing powers as from 1st July, 1936. But the area within New South Wales adapted for banana growing is strictly limited and further extension is unlikely. Some reduction in area has already occurred and a tendency not to renew worked-out plantations is observable.

The following table shows the area cultivated for and the production of bananas in certain years since 1922:—

Year ended 30th June.	Area.			Production.	
	Bearing.	Not bearing.	Total.	Cases.	Farm value.
	acres.	acres.	acres.		£
1922 ... ..	4,570	898	5,468	433,533	260,120
1925 ... ..	1,002	502	1,504	60,763	47,090
1930 ... ..	1,806	1,534	3,340	117,120	107,840
1931 ... ..	2,621	2,338	4,959	216,756	139,090
1932* ... ..	4,733	2,394	7,127	343,427	181,730
1933* ... ..	6,241	5,034	11,275	533,560	326,810
1934* ... ..	8,643	8,795	17,438	691,627	340,050
1935* ... ..	12,179	3,893	16,072	993,165	306,220
1936* ... ..	11,856	1,173	13,029	1,004,868	331,180

\* Year ended 31st March.

The quantity of bananas imported oversea into New South Wales in 1935-36 was 7,136 centals valued at £2,461, including 4,069 centals from Fiji. The duty on bananas imported oversea is 1d. per lb., but since October, 1932,

in terms of the Ottawa Agreement, not more than 40,000 centals of Fiji bananas may be admitted annually into Sydney and Melbourne at a duty of 2s. 6d. per cental, plus primage, while sales tax is also payable on bananas imported from oversea. Bananas from Norfolk Island are not subject to duty.

### *Fruit Canning.*

The Commonwealth Government paid bounty on certain kinds of fruit canned in 1923-24, and on such fruit exported on or before 28th February, 1925. A sum of £3,102 was paid on fruit canned in New South Wales in 1927-28, the last year in which a bounty was paid. In subsequent years the fruit-canning industry in New South Wales was afforded Commonwealth assistance, of an indirect nature, per medium of the Fruit Industry Sugar Concession Committee whose main source of revenue is a payment (£216,000 per annum from 1st September, 1937) under the provisions of the Sugar Agreement between the Commonwealth and Queensland Governments. The committee grants to fruit canners and jam manufacturers a rebate on the price of sugar used in the process of manufacture, on condition that a predetermined price is paid to the producer of the fruit required. Amounts of £36,441, £39,317, £51,959, and £38,913 were expended in this connection in successive years ended August, 1936. The amount involved in 1935-36 comprised domestic sugar rebate, £15,898, export sugar rebate, £11,670, and special export assistance, £11,344. The export of canned fruit, is supervised by the Canned Fruit Control Board constituted under Federal legislation. The quantity and value of the output of the fruit canneries in 1935-36 were much greater than in any previous year.

The following statement shows the quantity and value of canned fruit produced in factories in New South Wales during each of the past thirteen years:—

Year.	Fruit Preserved.	
	Quantity.	Value at Cannery.
	lb.	£
1923-24 ...	10,521,701	242,255
1924-25 ...	17,019,569	408,101
1925-26 ...	11,325,850	264,794
1926-27 ...	8,261,091	182,436
1927-28 ...	13,922,386	242,537
1928-29 ...	14,213,747	258,037
1929-30 ...	17,133,226	271,360
1930-31 ...	15,812,219	253,205
1931-32 ...	7,609,691	136,776
1932-33 ...	19,447,512	342,099
1933-34 ...	17,653,693	329,477
1934-35 ...	21,446,194	392,891
1935-36 ...	25,208,208	512,793

### *Dried Fruits.*

The dried fruits industry in New South Wales is of comparatively recent origin, its major growth having followed upon the development of the irrigation areas and of orcharding settlements established in post-war years. The principal dried vine fruits producing settlements are in the Murrumbidgee, Coomealla, Curlwaa, Goodnight and Pomona Irrigation areas, and small quantities of dried vine fruits are also produced in the Junee, Albury and Euston districts. The greater proportion of dried fruits produced in the Murray River districts is packed in Victorian packing houses whose premises are registered with the Victorian Dried Fruits

Board, but the quantities produced are included in the following statement showing the total production of dried fruits in New South Wales in each of the last twelve seasons:—

Season.	Dried Fruit.						
	Apricots.	Grapes.*	Peaches.	Pears.	Prunes.	Other.	Total.
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
1924-25 ...	893	25,133	1,628	412	3,321	206	31,593
1925-26 ...	775	29,301	1,334	303	3,111	65	34,889
1926-27 ...	4,072	50,170	655	165	1,890	39	56,991
1927-28 ...	4,577	35,369	4,782	630	12,657	388	58,403
1928-29 ...	9,097	69,842	3,461	355	17,633	453	100,841
1929-30 ...	6,473	93,673	2,866	265	24,305	410	127,992
1930-31 ...	2,243	55,793	2,647	346	31,784	194	93,007
1931-32 ...	6,260	70,793	1,385	257	2,901†	41	81,637
1932-33 ...	5,147	111,572	2,960	460	36,531	502	157,172
1933-34 ...	7,161	92,851	2,546	348	30,217	517	133,640
1934-35 ...	5,124	82,712	2,481	398	33,088	829	124,632
1935-36 ...	7,022	100,439	2,424	331	26,244	933	137,393

\* See table at page 572 for details.

† Failure of crop.

The table reveals a rapid expansion in the production of dried vine fruits and prunes between 1924-25 and 1932-33. The production of dried apricots, peaches, nectarines and pears varies considerably from year to year, and is principally dependent upon prices obtainable at the canneries and in fresh fruit markets. The area devoted to prune growing has declined somewhat, probably in reaction to the poor returns of recent years. To assist prune growers the Commonwealth provided a bounty of 3d. per lb. on prunes exported from Australia during the year 1935 and of 1d. per lb. in respect of shipments in 1936.

Even larger quantities of dried fruits are grown on the irrigation areas of other Australian States, mainly in Victoria and South Australia. In recent years the production of dried fruits has largely exceeded the Australian demand, and on account of the low prices prevailing abroad, legislation was passed by the States concerned and by the Commonwealth to make provision for organised marketing. In this way the local and less profitable export trade is distributed on an equitable basis amongst the producers in the various States, and the Commonwealth assists in the export and disposal of dried fruits in the oversea markets. This system, involving the regulation of interstate trade, was attacked in the courts, and held by the Privy Council to be in excess of constitutional powers.

Although proposals submitted to the electors by referendum on 6th March, 1937, to confer upon the Commonwealth powers in regard to marketing were rejected, State legislation has been in no way invalidated, and it is hoped that the system hitherto operated under legislative sanction may be continued successfully on a basis of voluntary co-operation of producers and dealers in dried fruits throughout the Commonwealth.

The New South Wales Dried Fruits Board, constituted under the Dried Fruits Act, 1933, has regulated the marketing of dried vine fruits—sultanas, currants, and lexias—since 1928, and of dried tree fruits—dried prunes, apricots, peaches, nectarines and pears—since 1932. All dried fruits must be hygienically packed and properly treated and graded in packing houses registered with the Board, and boxes containing dried fruits must be properly branded. Growers and dealers are registered and the cost of administration is met principally by a contribution from the growers who have paid a levy of 1-32d. per lb. of dried fruits produced in each year since 1933.

Based upon estimates of Australian production and consumption made in consultation with the other producing States, quotas, uniform with

those declared in other States, are declared by the Board fixing the proportion of production of each kind of dried fruit which may be sold within the State. Under the State legislation selling within the State in excess of the quota is forbidden. Except in these ways and by the restraint upon interstate marketing formerly exercised by Federal legislation and now by agreement, the Board does not in any way interfere with the freedom of sale and distribution of the products, which are left entirely to private enterprise.

The quotas determined in 1935 and 1936, and the quotas (subject to revision) for 1937 were:—

Year.	Currants.	Sultanas.	Lexias.	Prunes.	Peaches.	Apricots.	Nectarines.	Pears.
Quota for Intrastate Trade—Per cent. of Production.								
1935 ...	17½	17½	70	50	60	52½	67½	67½
1936 ...	30	17	40	75	67½	7½	60	55
1937† ...	19	17	47½	62½	66½	...	80	37½

† Opening quotas—subject to revision.

### Vegetables.

As agricultural and pastoral statistics are collected only in respect of holdings of one acre or more in extent, they do not provide a complete census of vegetable growing. Nevertheless the information obtained may be considered to provide reasonably complete particulars of operations conducted on a commercial basis.

A considerable proportion of the vegetables produced on holdings of one acre and over are grown in market gardens, and data as to individual crops are not available in respect of these. In 1935-36 market garden produce was grown on 1,506 holdings, in areas of one acre or more, the total area being 7,026 acres and the farm value of production was £349,261. The area and production of individual crops, exclusive of areas cultivated in market gardens and on holdings less than one acre in extent, were as follow:—

Vegetables.	1933-34		1934-35.		1935-36.	
	Area of Crop.	Production.	Area of Crop.	Production.	Area of Crop.	Production.
Potatoes—	acres.	tons.	acres.	tons.	acres.	tons.
Early (Summer)	20,089	43,532	19,662	46,033	22,743	62,882
Late (Winter)						
Sweet ...	160	730	242	1,070	270	1,152
Onions ...	161	472	114	289	85	231
Turnips ...	1,259	4,360	1,410	4,733	2,119	5,979
Other Root Crops ...	170	651	205	673	469	1,876
Pumpkins and Melons	3,228	10,920	3,713	12,447	4,611	14,981
Tomatoes ...	2,223	Half-cases 400,304 £	2,421	Half-cases 500,794 £	2,227	Half-cases 530,120
Peas ..	10,973	69,471	9,497	72,389	11,577	94,957
Beans ...	1,659	31,390	1,699	27,315	1,597	30,791
Cabbages ...	636	10,305	666	10,430	546	11,766
Cauliflowers ...	700	12,901	522	10,120	639	11,783
Other ...	354	8,783	293	9,810	447	12,191

### Potatoes.

Potatoes are the most important vegetable crop grown in New South Wales, but local production is not nearly sufficient to meet the States' requirements and large quantities are imported from other States, principally Tasmania and Victoria. In 1911 there were 44,452 acres under

potatoes and the yield (121,033 tons) was the highest on record. There was a progressive decline in the area cultivated for potatoes in the post-war years up to 1929-30, and in that year only 12,785 acres were sown, producing 23,907 tons of tubers, or less than in any year since 1860. A gradual increase occurred in the next three years, since when an average of over 20,000 acres has been maintained.

Greater attention has been given to seed selection and cultural practice in recent years, and in 1935-36 the yield per acre (2.76 tons) was higher than in any year since 1923-24, and production (62,882 tons) was greater than in any year since 1920-21. Only a limited proportion of the area suitable for potato growing is so utilized, but marked irregularity of prices and the consequent unreliability of returns to the grower, act as a deterrent to material expansion. Potatoes are most extensively grown in the Tableland divisions but considerable areas are also in cultivation in coastal areas. The following statement provides a comparative summary of the vicissitudes of potato growing during the past thirty years:—

Season ended 30th June.	Area Sown with Potatoes.	Production of Potatoes.	Average Yield per Acre.	Farm Value of Production.	
				Total.	Average per Acre.
	acres.	tons.	tons.	£	£ s. d.
1906-11 (average) ...	35,042	92,742	2.65	418,000	11 18 7
1916-21 " ...	22,725	47,783	2.10	330,904	14 11 3
1921-26 " ...	24,075	51,010	2.12	344,580	14 6 4
1926-27 ...	21,941	53,288	2.43	340,620	15 10 6
1927-28 ...	21,578	47,397	2.19	182,480	8 9 1
1928-29 ...	14,830	26,339	1.78	325,950	21 19 7
1929-30 ...	12,785	23,907	1.87	159,880	12 10 1
1930-31 ...	15,304	32,283	2.11	169,490	11 1 6
1931-32* ...	17,522	33,709	1.92	152,110	8 13 7
1932-33* ...	20,739	42,403	2.04	113,960	5 9 11
1933-34* ...	20,089	43,532	2.17	143,660	7 3 0
1934-35* ...	19,662	46,033	2.34	320,500	16 6 0
1935-36* ...	22,743	62,882	2.76	394,580	17 8 0

\* Year ended 31st March.

#### MISCELLANEOUS CROPS.

Particulars of miscellaneous crops of the State are shown below:—

Crop.	Year ended 31st March, 1935.			Year ended 31st March, 1936		
	Area.	Production.	Yield per acre.	Area.	Production.	Yield per acre.
<b>Hay—</b>	acres.	tons.	tons.	acres.	tons.	tons.
Wheaten ...	271,272	342,135	1.26	224,632	266,956	1.19
Oaten ...	349,174	434,011	1.24	328,866	396,706	1.21
Lucerne ...	134,703	225,786	1.68	103,478	171,498	1.66
Other ...	2,265	2,829	1.25	1,834	2,226	1.21
Green Fodder ...	477,060	£1,054,042	*	610,401	£1,179,047	*
		bushels.	bushels.		bushels.	bushels.
Rye (Grain) ...	4,605	61,320	13.3	5,936	98,700	16.6
Broom Millet—						
Grain ...	2,614	9,390	3.6	1,652	7,740	4.7
Fibre ...		14,761	5.6		8,425	5.1
<b>Root Crops—</b>		tons.	tons.		tons.	tons.
Potatoes ...	19,662	46,033	2.3	22,743	62,882	2.8
Other ...	1,971	6,771	3.4	2,943	9,238	3.1
<b>Miscellaneous Crops—</b>		cwt.	cwt.		cwt.	cwt.
Tobacco (Dried Leaf)	560	2,053	3.7	934	5,953	6.4
<b>Sugar Cane—</b>		tons.	tons.		tons.	tons.
Crushed ...	7,572	227,424	30.0	10,416	280,472	26.9
Stand-over ...	10,959	...	...	9,794	...	...

\* Comparative averages not available.

Details respecting each of these crops are shown in the "Statistical Register of New South Wales."

Formerly the greater part of the area cultivated for hay was sown with wheat, but cultivation of oaten hay has progressively increased in the last few years for reasons indicated at page 570, and in 1935-36 was the most extensive hay crop grown. Lucerne is more or less a permanent crop.

The area of land cultivated expressly for green fodder is not known. The area shown in the foregoing table includes wheat areas which failed to mature for grain or hay and were used as green fodder for stock, with a fed-off value of 7s. 6d. or more per acre in 1931-32, and 10s. or more per acre in subsequent years.

#### PLANT DISEASES ACT, 1924.

A brief description of this Act was published at page 606 of the Year Book for 1928-29.

#### *Fruit Census, 1923.*

In 1923 a special census was taken to ascertain the number of trees of each variety of each kind of fruit planted in New South Wales, in order to facilitate consideration of the problem of marketing.

The results were briefly summarised on page 504 of the Official Year Book for 1923, and were published in full in the *Agricultural Gazette* of February, 1925.

#### *Registration of Farm Produce Agents.*

Provision is made under the Farm Produce Agents Act, 1926-32, which is designed to protect the interests of producers, for the licensing of persons engaged in the business of farm produce agents, *i.e.*, in the handling for sale as agent of fruit, vegetables, potatoes and other edible roots and tubers, eggs, poultry, honey and such other commodities as may be prescribed by regulation. Unless selling farm produce, stock and station agents and auctioneers do not come within the definition of farm produce agent, and, unless selling farm produce to other than members, co-operative societies are not required to register.

Licenses, for which the fee is £1, subsist for a calendar year, and applicants must be above the age of 21 years, and, with some exceptions, must furnish a fidelity guarantee bond of £1,000 (or of £2,000 in the case of a firm), and be neither an undischarged bankrupt or have been guilty of fraud or convicted of an offence punishable by imprisonment for a term exceeding three months within the preceding five years.

Agents must account for sales within fourteen days of disposal, keep prescribed books (which are open to inspection by the registrar under the Act) and may not purchase produce received for sale without consent of the client, or destroy produce without official authority. Penalties are provided against the furnishing of false accounts, knowingly or fraudulently spreading false reports calculated to affect prices, misrepresentation, or the buying of farm produce without prior arrangement as to price. Charges for commission are regulated under the Act.

On 23rd November, 1937, the number of agents who had been registered was 294, of whom 238 were in the metropolitan area, 18 in Newcastle, and 38 in other country centres.

## WATER CONSERVATION AND IRRIGATION.

A brief outline of the problem of water conservation and irrigation and of the policy adopted in New South Wales was published in the Year Book for 1928-29 at page 608.

The Murrumbidgee, Hay, Curlwaa and Coomealla Irrigation Areas were described on pages 609 to 611 of the Year Book for 1928-29 and details of subsequent developments are contained in the Annual Reports of the Water Conservation and Irrigation Commission and in the Report of the Auditor-General. An outline of the system of land administration applying to these areas and the tenures under which these lands are occupied will be found in the chapter "Land Legislation and Settlement" of this Year Book.

A summary of the expansion of the Murrumbidgee Irrigation Scheme is provided below:—

Year ended 30th June;	Water Distributed.	Area Watered.	Value of Rural Production *	Revenue derived.			
				Water Rates and Charges	Land Lease Rentals	Interest on Advances	Other Revenue.
	acre feet	acres.	£	£	£	£	£
1924	66,433	56,076	600,000	30,957	74,276	111,600	2,602
1925	68,785	58,698	720,000	34,778	74,985	125,452	1,821
1926	81,949	57,810	800,000	38,707	73,287	120,086	650
1927	104,158	59,795	884,000	45,976	73,994	118,794	1,667
1928	139,441	64,938	841,000	54,521	72,355	101,382	2,476
1929	214,170	75,254	970,000	69,227	74,670	83,211	806
1930	301,545	92,503	1,002,000	101,194	82,999	77,472	2,367
1931	173,696	76,384	868,000	56,239	83,914	81,248	1,527
1932	178,914	57,665	882,000	53,647	91,210	81,133	1,002
1933	222,663	77,034	1,116,000	66,829	75,084	61,109	1,495
1934	225,386	89,628	1,026,000	64,520	71,149	41,256	593
1935	213,487	95,735	1,100,000	66,118	46,682	21,258	977
1936	267,890	†	1,184,000	£0,056	53,928	42,770	7,283

\* Excluding value added in factories. † Information not available.

The decreased revenue from rentals and interest between 1929-30 and 1934-35 was due to concessions granted by the Government to assist settlers and of the inability of settlers to fully discharge obligations during the years of depression. Information respecting these concessions is published in the chapter "Land Legislation and Settlement" of this volume.

The capital expenditure connected with the irrigation area was £9,570,333 as at 30th June, 1936, of which £9,368,992 was expended on Loan Account. This sum was reduced by £2,083,983 written off for various reasons, including £2,012,009 on account of Soldier Settlement.

### PRODUCTION ON IRRIGATION SETTLEMENTS.

Comparative statistics of the irrigation settlements established and controlled by the State in New South Wales are shown in the following statement. The particulars for 1910-11 relate to the Hay and Curlwaa settlements only, as farming operations on the Murrumbidgee area did not commence until the season 1912-13, and the first section of the Coomealla project did not become available until 1925. The total area under occupation

(including non-irrigable lands) in these areas as at 30th June, 1936, was:—Murrumbidgee, 318,070 acres (exclusive of town lands); Coomealla, 3,248 acres; Curlwaa, 9,465 acres; and Hay, 5,335 acres.

Particulars.	1910-11.	1920-21.	1930-31.	1935-36.			
				Murrumbidgee.	Hay.	Curlwaa and Coomealla.	Total.
Cultivated Holdings... No.	86	1,190	1,598	1,368	7	248	1,623
Area under—							
All Crops ... Acres	862	31,065	114,441	97,489	56	3,397	100,942
Grain ... .. "	2	2,860	75,269	55,733	...	...	55,733
Hay & Green Food ... "	399	16,085	16,032	20,840	56	131	21,027
Grape Vines—							
Bearing ... .. "	186	1,253	6,301	5,660	...	1,981	7,641
Not yet Bearing ... "	74	1,896	1,452	435	...	89	524
Orchards—							
Bearing ... .. "	58	4,154	10,507	10,861	...	1,127	11,988
Not yet Bearing ... "	139	4,414	4,079	3,022	...	65	3,087
Live Stock—							
Horses ... .. No.	239	5,264	6,131	6,227	111	516	6,854
Cattle—							
Dairy ... .. "	484	4,007	*2,416	*2,938	*392	*49	*3,379
Other ... .. "	530	5,463	3,163	5,921	144	180	6,245
Sheep ... .. "	703	16,927	76,609	138,143	2,301	184	140,628
Pigs ... .. "	134	2,564	1,889	1,720	63	6	1,789
Production—							
Wine ... .. gal.	...	64,000	904,402	2,122,522	...	...	2,122,522
Sultanas ... .. cwt.	1,009	2,923	33,250	7,552	...	53,416	60,968
Raisins and Lexias ... "		967	2,139	436	...	3,449	3,885
Currants ... .. "		2,188	5,862	1,294	...	13,955	15,249
Oranges—							
Washington Navel bush.	273	49,328	355,629	291,003	2	70,375	361,380
Valencia ... .. "		21,323	199,990	229,641	...	46,927	276,568
All other ... .. "		3,455	24,340	14,300	...	4,224	18,524
Lemons ... .. "	...	11,062	54,208	42,493	...	3,696	46,189
Peaches—							
Dessert & Drying ... "	2,467	40,433	45,995	26,573	...	16,936	43,509
Canning ... .. "		172,361	204,848	298,104	...	...	298,104
Nectarines ... .. "		3,751	4,944	6,116	...	1,758	7,874
Apricots ... .. "	2,905	58,136	86,079	169,615	...	10,516	180,131
Prunes ... .. "	...	10,829	86,698	81,623	...	638	82,261
Butter ... .. lb.	5,100	40,761	374,121	589,586	1,810	...	591,396
Bacon and Ham ... .. "	820	11,413	116,500	2,335	...	...	2,335
Grain—Wheat ... bush.	...	24,648	503,664	361,788	...	...	361,788
Rice ... .. "	...	...	1,427,413	2,085,707	...	...	2,085,707
Oats ... .. "	...	9,207	68,247	95,736	...	...	95,736
Other ... .. "	...	9,171	4,386	3,711	...	...	3,711

\* Cows in registered dairies only.

The total area under crop increased considerably between 1921 and 1931 because of the extension of grain crops (mainly rice and wheat). In addition to meeting the whole of Australian requirements, production

of rice on the Murrumbidgee Irrigation Area supplies an exportable surplus. Exports of local rice from Australia in 1935-36 were valued at £150,904, and in the preceding year, £149,562. Reference might be made to page 568 of this issue for further information in relation to rice-growing in these areas.

Between 1931 and 1936 there was a substantial increase in dairying, but the number of dairy cattle declined in 1935-36, when some settlers transferred activities from dairying to fat lamb raising, resulting in an increase in the number of sheep on the area of about 35 per cent. during that year.

Oranges, peaches, apricots, apples, and prunes are the principal kinds of fruit produced. The yields of apples, oranges and peaches may be expected to increase rapidly as the young trees become increasingly productive.

The following statement shows the number of fruit trees of the principal varieties, on the irrigation settlements, distinguishing the productive from those not yet bearing:—

Fruit Trees.	1910-11.		1920-21.		1930-31.		1934-35.		1935-36.	
	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.
Orange—										
Seville ...			1,150	6,283	1,071	812	1,126	...	560	...
Washington ...	202	3,606	60,810	70,314	228,445	65,529	246,544	34,553	245,770	29,684
Navel ...										
Valencia ...			27,425	40,028	121,478	105,874	175,519	50,951	184,543	45,707
All other ...	119	136	3,134	5,443	14,420	4,476	12,148	1,259	16,978	2,111
Lemon ...	...	...	13,766	17,881	27,856	14,066	28,839	10,413	27,113	8,063
Mandarin ...	...	...	1,888	3,571	15,052	7,092	15,365	2,432	13,608	1,967
Peach—										
Desert ...			31,022	29,664	32,194	2,691	29,764	5,253	25,757	3,500
Drying, ...										
Canning ...	1,752	4,503	118,811	73,804	160,621	54,153	159,765	62,673	174,255	80,113
Nectarine ...			3,739	4,020	4,566	1,079	4,905	993	4,291	1,059
Apricot ...	2,033	2,969	51,624	37,901	101,087	6,201	98,956	5,555	95,948	7,699
Prune ...	...	...	14,832	62,353	107,462	4,974	96,282	2,874	92,667	2,482
Plum ...	98	282	8,475	6,812	8,696	823	9,402	1,892	6,402	1,838
Pear—										
Williams ...			10,908	15,596	12,932	2,075	14,605	4,040	13,985	4,061
Other ...	165	1,096	5,663	3,457	6,925	918	6,461	852	6,394	1,199
Apple ...	400	718	3,452	10,240	51,577	69,603	92,926	48,593	93,117	57,286
Fig ...	201	38	1,428	2,995	6,350	4,833	7,852	2,717	9,205	845
Almond ...	...	140	6,948	8,631	22,785	6,214	27,854	10,277	29,277	16,833

The growing of oranges is the most extensive activity, and large quantities of peaches are grown, especially for canning, also apricots, prunes, pears, and apples. Though the number of trees of all ages has shown little change over the past four seasons, the proportion of trees in bearing increased from about three-fourths the total in 1930-31 to about four-fifths in 1935-36. A considerable area is also under grapes for wine, table and drying purposes. Further information as to the fruit growing, canning and drying industries is published in the chapter "Agriculture" of this Year Book.

Crops are cultivated under irrigation in various localities other than irrigation settlements established by the Government. A summary of all crops which were watered artificially—including those to which the foregoing tables relate—indicates that the total area irrigated in 1935-36 was 138,016 acres. The principal crops were as follows:—Wheat, 23,949 acres; lucerne, 28,309 acres; oats, 23,927 acres; rice, 21,705 acres; orchards, 16,634 acres; grapes, 9,394 acres; green food, 2,209 acres; market gardens, 5,761 acres.

## IRRIGATION PROJECTS.

An account of the irrigation projects connected with the Murray, Lachlan, Macquarie and Namoi rivers and the Warragamba scheme was published on pages 613 to 615 of the Year Book for 1928-29. Later particulars are contained in the annual reports of the River Murray Commission and the Water Conservation and Irrigation Commission of New South Wales.

Under Part VI of the Water Act, 1912-1930, Districts may be established for the provision of a water supply to landholders for domestic and stock purposes only, or for domestic and stock purposes and irrigation. Such works are constructed by the Commission, which controls the distribution of water and makes annual charges to meet interest on the cost of the works and the expenses of operation and maintenance. The following provisional districts have been constituted under this part:—

Name of District.			River.	Area.	Date of Constitution.	Estimated Cost.*
				Acres.		£
Wakool	...	...	Murray	541,753	17 June, 1932	515,000
Benerembah	...	...	Murrumbidgee	121,744	23 „ 1933	54,000
Tabbita	...	...	do	6,316	16 Aug., 1935	4,470
Berriquin	...	...	Murray	611,600	9 Mar., 1934	438,000
Jemalong	...	...	Lachlan	171,664	28 Sept., 1934	} 140,000
Wyldes Plains	...	...	do	51,555	28 June, 1935	

\* Subject to revision.

At present it is not proposed to resume or appropriate land and subdivide for settlement, but to supply water to existing landholders. Water will not be supplied to irrigate commercial orchards or vineyards or for the growing of rice, and it is expected the main purpose of irrigation supplies will be for the growing of fodder crops or for sown pastures.

During the year ended 30th June, 1936, water was supplied to all the holdings within the Tabbita and Benerembah Districts. The works of the Wakool and Berriquin Districts were further advanced; water supplies were made to some of the holdings within the first-mentioned District. Construction of the necessary works for the Jemalong and Wyldes Plains Districts has not yet been commenced, but the Wyangala Dam has been completed.

## WATERWORKS.

Provision is made by the Water Act, 1912, and subsequent amendments for the issue of licenses and authorities for private irrigation schemes and permits for all water works constructed by private interests in connection with natural sources of water.

During 1935-36 applications for 378 new licenses and 291 for renewal of existing licenses for pumps, dams and other works were received, and the new licenses issued numbered 276. On 30th June, 1936, there were 2,029 licenses in force, most of which were issued for the term of five years.

Permits which are intended for works for mining and other purposes of a temporary nature, and for irrigation of areas not exceeding 10 acres, have a term up to twelve months, and may be reviewed for a further year. There were 136 applications for new or renewed permits for pumps, dams, races, etc., in 1935-36, at the end of which year permits then in force numbered 43.

Private irrigation authorities are issued where the holdings of two or more occupiers are irrigated from one work, with a term, usually, of five years. Applications (new and renewal) numbered 8 in 1935-36, and, 7 authorities were in force on 30th June, 1936.

*Bore, Irrigation and Water Trusts and Artesian Well Districts.*

The Water Act, 1912-1930, empowers the State to construct works to provide supplies of water for irrigation, domestic and stock purposes, flood prevention and drainage. The capital cost of such works, with interest, is repaid by beneficiaries in instalments over a period of years. The works are administered by trustees partly elected from among the beneficiaries and partly appointed by the State.

For the supply of water under these conditions trusts have been constituted up to 30th June, 1936, as follows:—

Purpose.	Trusts.	Area Benefited.	Cost of Works to Trust.
	No.	Acres.	£.
Artesian Bore Water Supply ... ..	82	4,722,837	294,932
Conservation by Weirs ... ..	4	72,620	5,292
Conservation by Weirs and Distribution by Artificial Channels ... ..	1	578,850	52,613
Pumping—			
(a) For Irrigation ... ..	7	16,013	11,589
(b) For Domestic and Stock ... ..	3	559,595	3,210
(c) For Domestic ... ..	1	55	2,295
Improvement of Natural Watercourses—			
By Cuttings, Regulators and/or Dams ... ..	10	2,984 801	49,576
Flood Prevention ... ..	1	2,190	Nil.
Totals ... ..	109	8,936,961	419,507

One Trust (Barooga) was dissolved on 26th July, 1935. Its area is to be included in the Berriquin Stock and Domestic Water Supply District.

Under the provisions of the Artesian Wells Act, 1897, now incorporated in the Water Act, 1912-1930, twelve artesian wells were sunk and 108 miles of distributing drains constructed at a cost of £22,758. The total area of the districts benefited by these works is 314,123 acres, and charges (which may not exceed 6 per cent. per annum on the cost of the works) are assessed by the local Land Board in each instance and paid by the occupiers.

*Artesian Bores.*

That portion of the great Australian artesian basin which extends into New South Wales covers approximately 70,000 square miles, and is situated in the northern and north-western hinterland of the State.

The first artesian bore was sunk in 1879 on the Kallara pastoral holding, between Bourke and Wilcannia, and the first Government bore was completed in 1884 at Goonery, on the Bourke-Wanaaring road.

The following statement shows the extent of the work which has been successfully effected by the Government, and by private owners, up to the 30th June, 1936:—

Bores.	Flowing.	Pumping.	Total.	Total Depth.
				feet.
For Public Watering-places, Trust Bores, etc. ...	137	49	186	394,444
For Country Towns Water Supply ... ..	3	1	4	6,533
For Improvement Leases ... ..	17	9	26	38,622
Total, Government Bores ..	157	59	216	439,599
Private Bores... ..	253	152	405	997,627

The average depth of Government bores is 2,035 feet, and of private bores 2,463 feet, and they range in depth from 89 feet to 4,338 feet.

The deepest bores in New South Wales are in the Moree district, one at Boronga having a depth of 4,338 feet and an outflow at present of 729,665 gallons per day; another at Dolgelly has a depth of 4,086 feet, and a discharge of 373,052 gallons per day. The largest outflow at the present time is at the Angledool No. 2 bore, in the same district, which yields 1,107,870 gallons a day, and has a depth of 3,479 feet.

Bore water shows considerable variation in temperature, ranging from 75 degrees Fah., to 140½ degrees Fah., at Thurloo Downs No. 2 Bore.

Of the 671 bores that have been sunk 410 are flowing, and give an approximate aggregate discharge of 66,585,144 gallons per day; 211 bores give a pumping supply, the balance of 50 being failures. The total depth bored is 1,057,475 feet.

The flow from 99 bores is used for supplying water for stock on holdings served in connection with 82 bore-water trusts and 12 artesian well districts under the Water Act, 1912, as amended by subsequent Acts. The total flow from these bores amounts to 29,606,326 gallons per day, watering districts of an area of 5,036,960 acres by means of 3,240 miles of distributing channels. The average rating of the bore trusts is 2.06d. per acre, including the cost of maintenance and administration.

The majority of the remaining bores are used by pastoralists for stock-watering purposes only, but in a few instances the supply is utilised in connection with country towns.

The watering of the north-western country by means of bore-water has largely increased the carrying capacity of the land; and, what is perhaps of greater importance, it has made practicable some pastoral settlement on small holdings in areas previously utilised by companies holding extensive areas.

It has been determined that the multiplicity of bores is the chief factor governing the annual decrease in bore-flows, also that the limitation of the discharge of water from a bore will prolong its existence as an efficient flow; action has been taken, therefore, to prevent any waste by the control of the bore-flow, and by its adjustment to actual needs.

#### *Shallow Boring.*

Arrangements were made by the Government in 1912 to assist settlers by sinking shallow bores. The scheme is administered by the Water Conservation and Irrigation Commission. The settler selects the site, and the Commission supplies the plant, materials and labour, and the cost is repaid

by the settler on terms. Operations were commenced with one plant only, but the number has been increased gradually to 35. During the year 1935-36 the Commission received 112 applications to have bores sunk by the Commission's plants, and 66 bores were completed.

Up to the 30th June, 1936, the number of bores sunk by the Commission's plants was 3,399, of which 601 were absolute failures, the total charges for sinking being approximately £816,383. The total depth of bores was 932,894 feet, the greatest depth of any bore being 2,318 feet.

In 1925 boring by private plants was sanctioned by the Government, which arranged to advance the necessary money to settlers for approved schemes, such advances being repayable by instalments with interest. Ninety-eight bores (including 21 failures) have been sunk under this scheme, the total depth being 50,630 feet, ranging from 150 to 1,500 feet, at an average cost of from 15s. 5d. to 49s. 6d. per foot. No bores were sunk under regulations relating to privately owned plants during 1935-36.

In 1929 the Department of Mines pointed out that in connection with surveys being carried out in respect of water resources considerable difficulty had been experienced in obtaining reliable data of the bores sunk in the past by private boring contractors, and suggested that settlers and boring contractors should be required to comply with some form of license which should include the provision that particulars of the completed bore be supplied for statistical purposes.

As a consequence the Water Act, 1912, was amended on the 28th November, 1930, and it is now necessary, in that part of the State west of direct lines drawn from Albury to Tamworth, Tamworth to Bingara, Bingara to Inverell, and Inverell to Bonshaw, to obtain a license in respect of bores proposed to be sunk to a depth of not less than 100 feet, and before an existing bore can be enlarged, deepened or altered to increase the flow of water therefrom.

Four hundred and sixty licenses were issued up to the 30th June, 1936.

#### *Growth of Artesian and Shallow Boring.*

The rapid development which has occurred in utilising the underground water resources of the State in recent years is evident from the fact that the number of successful bores of all kinds (exclusive of those sunk by private contract, increased from 458 in 1911 to 4,496 at 30th June, 1936.

## PASTORAL INDUSTRY.

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IN New South Wales the pastoral industry has always been the greatest source of primary production, contributing more than 40 per cent. of the total value during the last ten years. At 30th June, 1931, the latest date of collection of this information, the area of holdings used for grazing was approximately 155,900,000 acres, or approximately four-fifths the area of the State.

Some indication of the geographical distribution of the pastoral lands of New South Wales is given in succeeding pages and more detailed information in the chapter "Rural Settlement." About 90 per cent. of the area of the State utilised for the principal forms of rural activity is devoted to grazing. Depasturage of sheep is the outstanding pastoral pursuit and a feature of rural enterprise on the slopes and plains west of the mountains, but cattle raising is also important, both for dairying and slaughtering in the coastal belt, and for purpose of slaughter in the tablelands and slopes, and the plains exclusive of the Western Division.

In recent years concern has been occasioned by the deterioration of extensive pastoral and agricultural areas by erosion, and by the gradual encroachment of shifting sand masses in the westernmost parts of New South Wales. During 1935-36 an expert committee, appointed by the State Government, was engaged investigating the extent of the damage arising from these causes, and the Council for Scientific and Industrial Research has also concerned itself with the problem. Whilst the losses due to the forces of erosion have so far been relatively limited in their occurrence, they have been sufficiently serious to indicate the question as one of great national significance, calling for the consistent application of all practical remedies and safeguards to preclude further deterioration of the natural resources of the State.

### LIVE STOCK.

New South Wales does not possess any indigenous animals which would give rise to a large industry, and of those introduced, sheep only have developed into a prolific source of wealth. Indeed, the development of the sheep industries has been so remarkable that it has, in a sense, precluded the rise of other pastoral activities. Horses have been bred principally for their utility in various industries and for racing purposes, and there is a small oversea trade in remounts, but, generally speaking, horse-breeding has declined. For many years cattle were produced only to supply local requirements of meat and dairy produce, but later an export trade was established, and considerable expansion took place in the number of cattle depastured. Pigs are bred principally as a by-product of the dairying industry, and the number does not fully meet local requirements.

Stock breeders are being encouraged to import pedigree cattle, sheep, milch goats and certain breeds of swine from the United Kingdom by a scheme of assistance introduced by recommendation of the Australian Agricultural Council to operate for two years from 1st December, 1935. The shipping companies are carrying the stock freight free and charging only actual out-of-pocket expenses at fixed flat rates. All other expenses of transport are met, two-fifths by the purchaser, one-fifth each by the Commonwealth and the State Government concerned, and one-fifth by the Commonwealth Bank.

The following table shows the number of the principal kinds of live stock in New South Wales at the end of each decennial period, from 1861 to 1921, at 1926, and annually thereafter:—

As at 30th June.	Horses.	Cattle.	Sheep.	Pigs.
1861*	233,220	2,271,923	5,615,054	146,091
1871*	304,100	2,014,888	16,278,697	213,193
1881*	398,577	2,597,348	36,591,946	213,916
1891*	469,647	2,128,838	61,831,416	253,189
1901*	486,716	2,047,454	41,857,099	265,730
1911*	689,004	3,194,236	48,830,000	371,093
1921	663,178	3,375,267	37,750,000	306,253
1926	651,035	2,937,130	53,860,000	382,674
1927	623,392	2,818,653	55,930,000	332,921
1928	598,377	2,848,654	50,510,000	301,819
1929	567,371	2,784,615	50,185,000	311,605
1930	534,945	2,686,132	48,720 000	323,499
1931	524,512	2,840,473	53,366,000	334,331
1932†	524,751	2,993,586	52,986,000	385,846
1933†	528,943	3,141,174	53,698,000	388,273
1934†	532,028	3,361,771	52,104,000	367,116
1935†	534,853	3,482,831	53,327,000	397,535
1936†	542,862	3,388,538	51,936,000	436,944

\* At 31st December.

† 31st March.

Particulars of other live stock are shown on a later page.

To obtain an idea of the varying extent of pastoral pursuits in the State as represented by the number of live stock grazed it is necessary to express the various species in common terms. This cannot be done with exactitude, but, adopting the arbitrary equivalent of ten sheep to each head of large stock, the following comparison is obtained:—

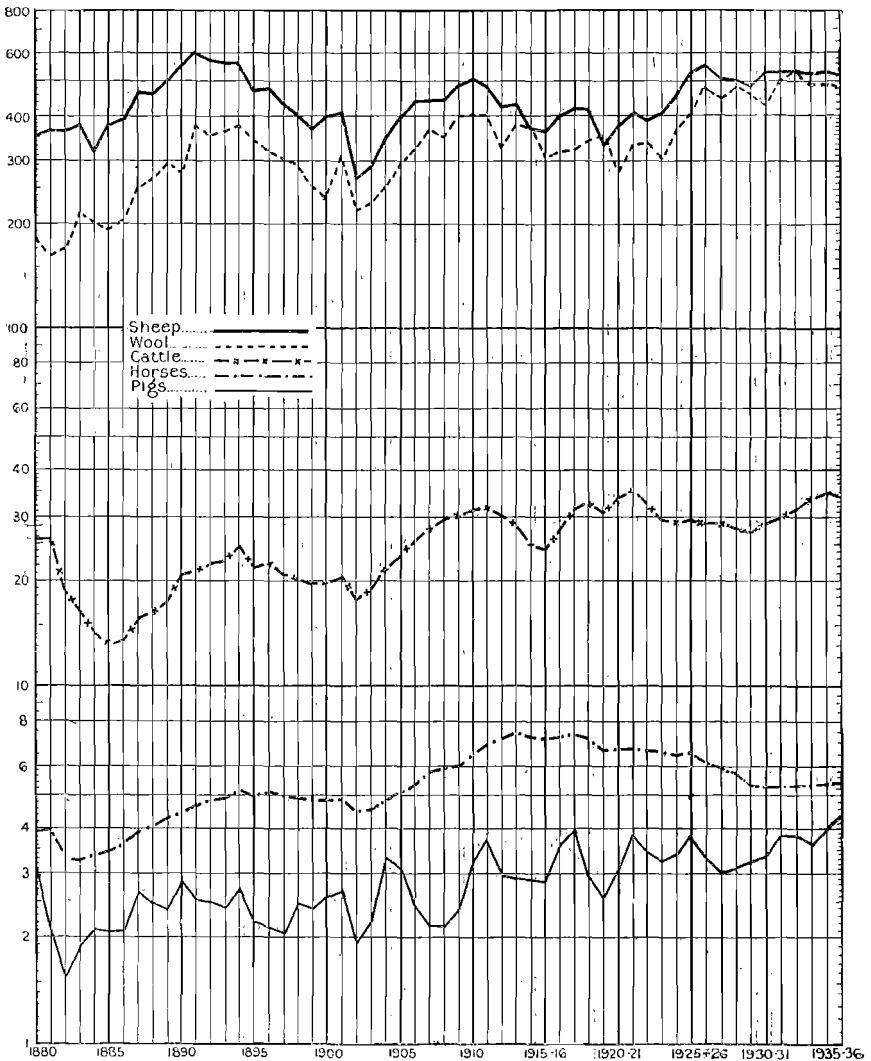
Year.	Equivalent in Sheep of Live Stock grazed.	Year.	Equivalent in Sheep of Live Stock grazed.
1861	30,666,000	1928*	84,980,000
1871	39,469,000	1929*	83,700,000
1881	66,551,000	1930*	80,930,000
1891	87,816,000	1931*	87,016,000
1901	67,199,000	1932†	88,169,000
1911	87,662,000	1933†	90,399,000
1921*	78,134,000	1934†	91,042,000
1926*	89,740,000	1935†	93,504,000
1927*	90,350,000	1936†	91,250,000

\* At 30th June, previous years at 31st December.

† At 31st March.

## LIVE STOCK AND PRODUCTION OF WOOL, 1880 to 1935-36.

Ratio Graph.



The numbers at the side of the graph represent 1,000,000 lb. of wool (as in grease) produced during year; and 100,000 sheep, cattle, horses, and pigs at end of year.

The diagram is a ratio graph. The vertical scale is logarithmic, and each curve rises and falls according to the rate of increase or decrease. Only in this respect can the curves be directly compared. Actual data are shown by means of the numbers at the side of the graph.

The sustained increase up to 1891 was due to development of idle and partly used lands and was based mainly on sheep grazing. It has been held that in 1891 the State was overstocked having regard to the scanty pastoral improvements on holdings in the hinterland. The influence of seasonal conditions is shown in the fluctuations between 1891 and 1936. The sheep equivalent of live stock grazed reached its lowest point (48,560,000) in 1902 at the culmination of years of the severest drought on record and was 70,640,000 at the culmination of another severe drought in 1920. In the latter year, however, there was a proportionately larger number of cattle grazed (3,084,000) as compared with 1,741,000 in 1902. Since 1930 relatively favourable seasons and increasing conservation of fodder have combined to promote a gradual increase in numbers, and although the flocks and herds were greater in 1935 than at any other year in the history of the State, there is no reason to believe that the carrying capacity of the pastures was then overtaxed.

### *Manuring of Pastures.*

Toward the close of the second decade of this century the advantages of the top-dressing of pastures began to be more generally recognised, and in 1928-29 artificial manures totalling 80,979 cwt. were used for this purpose on 689 holdings. Adverse circumstances in following years caused the practice to be greatly curtailed, and in 1930-31 only 20,943 cwt. of fertilizer was used in manuring pastures on 371 holdings.

This form of pasture improvement steadily increased over the four years ended, 1934-35 partly under the encouragement of the fertilizer subsidy provided by the Commonwealth Government, details of which are given at page 530 of this issue, and to some extent, owing to an improvement in conditions in the pastoral and dairying industries. More landholders practised top-dressing with manures in 1935-36 than in any previous year, the area so treated and the amount of fertilizer being approximately four times as great in 1928-29. Although the area dressed with artificial manures is still very small relatively to the vast pasture lands within the State, it is apparent that it is being more generally appreciated that greater attention must be given in this aspect of rural activity, if the productive resources of the pastures are to be fully exploited. Particulars relating to the use of artificial manures in the improvement of pastures in each season since 1927-28 are shown hereunder.

Season.	Holdings Using Artificial Manures on Pastures.	Quantity of Artificial Manures Used.	Area Treated with Artificial Manures.	Average Quantity of Manure Used Per Acre.
	No.	Cwt.	Acres.	lb.
1927-28 ... ..	379	34,996	40,296	97
1928-29 ... ..	689	80,979	87,686	103
1929-30 ... ..	603	58,061	61,797	105
1930-31 ... ..	371	20,943	19,254	122
1931-32 ... ..	450	25,187	26,511	106
1932-33 ... ..	683	46,953	50,979	103
1933-34 ... ..	986	65,290	65,692	111
1934-35 ... ..	1,794	128,870	135,259	107
1935-36 ... ..	3,426	334,724	351,209	107

### *Comparison—Live Stock in the Commonwealth.*

A comparison of the number of horses, cattle, sheep, and pigs in New South Wales and in the other States of the Commonwealth is shown in the

following table. The figures are as at 31st December, 1935, excepting where otherwise specified:—

State.	Horses.	Cattle.	Sheep.	Pigs.
New South Wales (a) ...	542,862	3,388,538	51,936,000	436,944
Victoria ...	356,106	2,091,246	17,457,291	314,301
Queensland ...	430,399	5,974,299	17,806,188	304,888
South Australia ...	197,368	335,354	7,945,745	93,458
Western Australia ...	160,181	882,761	11,082,972	98,026
Tasmania ...	30,626	270,035	2,149,900	45,163
Northern Territory ...	35,152	900,535	25,483	555
Federal Capital Territory (a) ...	1,060	10,186	228,317	629
Total, Australia ...	1,753,754	13,852,954	108,631,896	1,293,964
Proportion per cent, in N.S.W....	30·95	24·46	47·81	33·77

(a) As at 31st March, 1936.

In New South Wales there are more sheep, horses and pigs than in any other State in the Commonwealth, but Queensland has more cattle.

### *Distribution of Live Stock.*

In order to indicate the distribution of flocks and herds in New South Wales the following table has been prepared. It shows the number of live stock, and the number per square mile, in each division at intervals since 1891.

Division.	Number of Live Stock (000 omitted).						Number per square mile.			
	1891.	1901.	1911.	1921.†	1931.‡	1936.§	1891.	1911.	1931.†	1936.§
<b>SHEEP—</b>										
Coastal Belt ...	1,483	1,097	1,559	1,048	1,159	1,187	42·5	44·9	33·3	34·1
Tableland ...	7,882	8,859	9,735	7,524	11,304	12,079	195·3	235·2	280·0	299·1
Western Slopes ...	10,869	11,672	12,167	9,743	17,270	16,738	286·8	275·2	392·4	380·1
C'l Plains & Riverina ...	25,194	14,706	17,433	14,370	16,910	15,579	351·8	269·4	261·3	240·6
Western Division ...	16,403	5,523	7,936	5,065	6,223	6,353	130·6	63·2	53·6	50·6
Whole State ...	61,831	41,857	48,830	37,750	53,366	51,936	199·2	157·3	172·4	167·8
<b>CATTLE, DAIRYING—</b>										
Coastal Belt ...	197	284	653	674	991	996	5·6	18·7	25·9	28·6
Tableland ...	67	70	107	73	44	58	1·7	2·7	1·1	1·4
Western Slopes ...	37	40	78	59	51	85	1·0	2·1	1·1	1·9
C'l Plains & Riverina ...	35	20	48	36	9	17	0·5	0·7	0·1	0·3
Western Division ...	7	4	9	2	1	2	0·1	0·1	0·0	0·0
Whole State ...	343*	418*	895	844	1,066†	1,158†	1·1	2·9	3·3	3·7
<b>CATTLE, OTHER—</b>										
Coastal Belt ...	640	667	915	1,009	730	730	18·3	26·2	21·1	21·0
Tableland ...	465	501	550	550	404	520	11·5	13·6	10·0	12·9
Western Slopes ...	247	306	422	441	397	567	6·5	11·1	9·0	12·9
C'l Plains & Riverina ...	339	115	302	369	234	320	4·7	4·2	3·6	4·9
Western Division ...	94	41	110	132	63	93	0·7	0·9	0·5	0·7
Whole State ...	1,785	1,630	2,299	2,531	1,834	2,230	5·8	7·4	5·9	7·2
<b>HORSES—</b>										
Coastal Belt ...	163	161	207	203	144	143	4·7	5·9	4·1	4·1
Tableland ...	92	112	127	112	86	87	2·3	3·1	2·1	2·2
Western Slopes ...	76	111	180	168	159	167	2·0	4·8	3·6	3·8
C'l Plains & Riverina ...	95	78	140	152	112	122	1·3	2·0	1·7	1·9
Western Division ...	44	25	35	28	23	24	0·4	0·3	0·2	0·2
Whole State ...	470	487	689	663	524	543	1·5	2·2	1·7	1·8

\* Cows in milk only; dry cows and springing heifers are included in the total of Other Cattle.

† Cows in registered dairies only. ‡ At 30th June. § 31st March.

Sheep are depastured principally in the hinterland of the State, and are relatively most numerous in the Western Slopes Division. Dairying cattle and, in fact, all cattle, are more numerous in the coastal areas. Until 1922, horses were most numerous in the Coastal Division; since that year the Western Slopes Division contained the greatest number.

The divisional totals as stated for 1936 are not altogether comparable with those shown for the years 1891 to 1921, as they have been compiled in shire areas, and not in counties as formerly. The change in geographical basis involved considerable alteration in the areas comprising divisions of the Western Slopes and the Central Plains, where large numbers of stock are depastured.

The figures for the years 1891 to 1921, however, afford interesting information as to the localities most susceptible to losses of sheep through drought. The greatest decline between these years was in the Central Plains and Riverina, where the numbers fell from 352 to 222 per square mile (though this was partly due to the devotion of large areas within those divisions to agriculture), and the greatest relative decline was in the Western Division, where the falling-off was from 131 to 40 per square mile. Denudation of natural timber and shrubs and subsequent erosion by both wind and water and the depredation of rabbits have also contributed to decrease the carrying capacity of the Western Division.

There has been a material expansion in the depasturage of sheep on the Tablelands and Western Slopes in recent years, in which the greater carrying capacity due to pasture improvement, and the tendency toward greater diversification of rural enterprise have been foremost factors. The greater interest now being displayed in fat lamb raising may result in the further growth of the number of sheep in these divisions where seasonal conditions are more reliable than in the more westerly sections of the State.

### SHEEP.

Investigations carried out in 1926 showed that the numbers of sheep in the State as recorded in landholders' returns had been considerably understated, and, after exhaustive inquiries, it was found necessary to revise the recorded totals back to the year 1908. Since 1926 the number of sheep in the State has been ascertained partly from special returns and partly from estimates based on returns of landholders.

The following table shows the number of sheep as recorded in landholders' returns for various years between 1861 and 1906 in comparison with the adjusted totals since 1911. The figures are approximate, but they show the vicissitudes of sheep-breeding in New South Wales:—

Year.	Sheep.	Average Annual Rate of Increase.	Year.	Sheep.	Average Annual Rate of Increase.	Year.	Sheep.	Average Annual Rate of Increase.
			*			*		
1861	5,015,000	Per cent.	1896	48,318,000	Per cent.	1931†	53,366,000	Per cent.
1866	11,562,000	(+) 15.5	1901	41,857,000	(-) 4.8	1932†	52,986,000	(-) 0.2
1871	16,278,000	(+) 7.1	1906	44,132,000	(-) 2.8	1933†	53,698,000	(-) 0.7
1876	25,269,000	(+) 9.2	1911	48,830,000	(+) 1.1	1934†	52,104,000	(+) 1.3
1881	36,591,000	(+) 7.7	1916	36,410,000	(+) 2.0	1935†	53,327,000	(-) 3.0
1886	39,169,000	(+) 1.4	1921	37,750,000	(-) 5.6	1936†	51,936,000	(+) 2.4
1891	61,881,000	(+) 9.6	1926	53,860,000	(+) 0.7			(-) 2.6
					(+) 7.4			

\* At 30th June each year since 1916 and at 31st March for the years 1932 to 1936. (—) Denotes decrease.  
† Excluding Federal Capital Territory (approx. 219,000).

At 31st March, 1936, the number of sheep in the State was 51,936,000. The number was greatest in 1891, and thereafter lowest at the end of 1902 by reason of drought. The main cause of the reduction in the number of sheep between 1891 and 1921 seems to have been a remarkable deterioration

of seasons, due to diminished rainfall. This may be illustrated briefly by stating that the weighted average annual rainfall of the State was about  $3\frac{1}{2}$  inches less in the twenty years which followed 1894 than in the preceding quarter of a century, and that this decline was proportionally heaviest in the plain districts of low average rainfall, which in 1891 carried two-thirds of the sheep depastured in the State. The rabbit pest, too, had aggravated the effects of dry weather through destruction of natural herbage, while the growth of the agricultural industry caused land to be diverted from the purpose of sheep-breeding.

The sudden transition from very good to very bad seasons, which occurred in the early nineties, wrought such havoc amongst the flocks depastured on the immense western plains that by 1901 the returns showed a decrease from 16,400,000 to 5,500,000 sheep in the Western Division, and from 25,200,000 to 14,700,000 in the Central Plains and Riverina Division, and in 1902 these numbers were further reduced by 1,900,000 and 7,600,000 respectively. It is noteworthy that in 1936 there were many more sheep in the Tablelands and Western Slopes Divisions than in 1891, though considerably less in the Plains, Riverina and Western Divisions (see table on page 597).

Estimates based on returns supplied by landholders show the following approximate distribution of the flocks according to sex, also the number of lambs:—

As at 30th June.	Rams.	Ewes.	Wethers.	Lambs (under 1 year).	Total.
1927 ... ..	740,000	27,770,000	15,330,000	12,090,000	55,930,000
1928 ... ..	675,000	26,262,000	15,200,000	8,373,000	50,510,000
1929 ... ..	622,000	25,076,000	13,832,000	10,655,000	50,185,000
1930 ... ..	651,000	25,349,000	14,597,000	8,123,000	48,720,000
1931 ... ..	669,000	26,561,000	14,079,000	12,057,000	53,366,000
1932* ... ..	643,000	26,608,000	13,243,000	12,492,000	52,986,000
1933* ... ..	658,000	27,391,000	13,845,000	11,804,000	53,698,000
1934* ... ..	658,000	27,717,000	14,710,000	9,019,000	52,104,000
1935* ... ..	660,000	27,427,000	14,176,000	11,064,000	53,327,000
1936* ... ..	702,000	27,472,000	14,693,000	9,069,000	51,936,000

\* At 31st March.

The following table, compiled from the best data available, shows as nearly as may be the extent of each of the principal factors in the increase and decrease in the number of sheep in 1920-21 and since 1926-27. Figures for the years 1918-19 to 1925-26 were published in earlier issues of the Official Year Book.

Year.	Lambs Marked.	Sheep and Lambs Slaughtered.	Excess of Imports (+) or Exports (—)	Estimated number of Deaths* (Balance).	Net Increase (+) or Decrease (—)	Sheep at 30th June.
Thousands (000) omitted.						
1920-21† ...	8,750	3,850	(+) 1,980	2,280	(+) 4,600	37,750
1926-27† ...	12,630	5,620	(—) 2,640	2,300	(+) 2,070	55,930
1927-28† ...	9,220	5,010	(—) 1,990	7,640	(—) 5,420	50,510
1929† ...	12,560	5,380	(—) 2,410	4,540	(+) 230	50,740
1929-30† ...	9,887	6,327	(—) 2,075	3,505	(—) 2,020	48,720
1930-31† ...	14,615	6,254	(—) 820	2,895	(+) 4,646	53,366
						31st March.
1931-32§ ...	14,332	6,880	(—) 647	3,800	(—) 380	52,986
1932-33§ ...	14,221	7,519	(—) 2,453	3,537	(+) 712	53,698
1933-34§ ...	10,737	7,164	(—) 1,433	3,734	(—) 1,594	52,104
1934-35§ ...	12,996	6,810	(—) 938	4,025	(+) 1,223	53,327
1935-36§ ...	11,338	6,037	(—) 1,391	5,301	(—) 1,391	51,936

\* The figures in this column represent a balance and are only rough approximations. † Year ended 31st December. ‡ Years ended 30th June. § Year ended 31st March.

While the returns as to slaughter and border movement are considered accurate, the numbers of lambs marked and of sheep prior to 1929 are estimates based on landholders' returns and other data. The estimated number of deaths is a balancing column and its accuracy is affected by the degree of approximation present in the other items in the table. The numbers shown under this heading, however, have in recent years been checked against recorded totals and represent the approximate annual losses from drought, disease, pest, and natural causes generally.

The effect of adverse seasons on the sheep flocks is apparent in four directions, viz., losses by death attributable mainly to lack of fodder and water, increase in the slaughtering of fat stock, decrease in lambing, and increased export to other States.

A brief review of the rise of sheep breeding in New South Wales was published on page 771 of the Year Book for 1921, but this is modified by the remarks made on a previous page regarding the totals recorded in earlier years.

The extent to which sheep-grazing is conducted in conjunction with wheat-farming is shown at pages 543 to 546.

#### *Interstate Movement of Sheep.*

Apart from the seasonal movement of stock to and from agistment in other States, there is a regular export of sheep from New South Wales to Victoria. During the past five years, 10,849,000 sheep have been moved from New South Wales to Victoria, and 2,564,000 from Victoria to New South Wales, leaving an excess of exports to Victoria of 8,285,000. In the same period 3,914,000 sheep have been imported from Queensland to New South Wales, and 1,858,000 have been exported from New South Wales to Queensland, leaving an excess of imports of 2,056,000 from Queensland to New South Wales. The excess of exports to other destinations during the same period was 768,000, chiefly to South Australia, and the total excess of exports of live sheep from New South Wales for the period, 6,997,000, consisting mainly of sheep sent to market in Victoria from the southern districts of New South Wales.

The following table shows the movement of sheep from and to New South Wales, so far as is recorded, in 1920-21 and in recent seasons (July to June):—

Year.	Sheep from New South Wales.				Sheep to New South Wales.				Excess of Imports (+) or of Exports (—).
	To Victoria.	To Queensland.	To South Australia and by Sea.	Total.	From Victoria.	From Queensland.	From South Australia and by Sea.	Total.	
1920-21	000 850	000 97	000 125	000 1,072	000 936	000 2,050	000 70	000 3,056	000 (+) 1,984
1926-27	2,330	960	300	3,590	314	634	0	954	(—) 2,636
1927-28	2,507	989	122	3,618	938	587	103	1,628	(—) 1,990
1928-29	2,180	723	173	3,076	717	532	33	1,282	(—) 1,794
1929-30	2,744	631	112	3,487	715	661	36	1,412	(—) 2,075
1930-31	1,808	371	136	2,405	640	928	14	1,580	(—) 825
1931-32	2,176	240	315	2,731	520	1,338	17	1,864	(—) 867
1932-33	3,036	436	312	3,833	280	718	16	1,021	(—) 2,812
1933-34	2,077	386	82	2,545	744	584	62	1,390	(—) 1,155
1934-35	1,409	324	94	1,917	413	646	0	1,068	(—) 849
1935-36	2,012	472	86	2,570	601	628	27	1,256	(—) 1,314

#### *Lambing.*

The greater part of the lambing of the State takes place during the autumn and winter months, although considerable proportions of ewes, varying according to the nature of the season, are reserved for spring and early summer lambing. It is possible to breed from ewes twice per year, but it is not considered good policy and is rarely practised, except, perhaps, after

severe losses. Seasonal changes play a large part in determining the proportion of ewes mated and of resultant lambs, and thus cause wide variations in the natural increase.

The lambing season extends almost continuously from March to November and comparatively few lambs are dropped in the months of December, January and February. Special returns obtained in respect of each season's lambing since 1929 (excepting 1931) show considerable variation in the proportion of lambs marked to ewes mated, ranging from 57½ per cent. in 1929-30 to nearly 70 per cent. in 1931-32. Lambing results in recent years are displayed in the appended table:—

Year ended 31st March.				Ewes Mated.	Lambs Marked.	Proportion of Lambs Marked to Ewes Mated.
						per cent.
1929*	...	...	...	20,033,600	12,562,000	62·7
1930*	...	...	...	19,050,000	10,950,000	57·5
1931†	...	...	...	.....	.....	.....
1932	...	...	...	20,602,000	14,332,000	69·1
1933	...	...	...	21,040,800	14,221,200	67·6
1934	...	...	...	17,963,300	10,737,500	59·8
1935	...	...	...	20,648,500	12,996,300	62·9
1936	...	...	...	19,131,800	11,337,500	59·3

\* Calendar Year.

† Information not collected.

During 1933-34, when autumn and winter rains were unsatisfactory, fewer ewes were mated than for several years, whilst the relatively poor preceding pastoral season was also probably a factor. Stimulated by the recovery of wool prices in 1933-34, and helped by somewhat better seasonal conditions, graziers made efforts to increase their flocks in 1934-35 in almost all divisions of the State, and the decline in 1935-36 was due principally to droughty conditions in the north-west during that season. Records for each of the seasons 1934-35 and 1935-36 are shown below in statistical divisions:—

District.				Year ended 31st March, 1935.			Year ended 31st March, 1936.		
				Ewes Mated.	Lambs Marked.	Proportion of Lambs Marked to Ewes Mated.	Ewes Mated.	Lambs Marked.	Proportion of Lambs Marked to Ewes Mated.
Coast ... ..				000 220	000 147	per cent. 66·8	000 206	000 108	per cent. 52·4
Tablelands—North ...				575	332	57·7	460	202	43·9
Central ...				1,620	1,050	64·4	1,670	1,102	66·0
South ...				1,092	775	70·9	1,035	720	69·6
Total ...				3,287	2,157	65·6	3,165	2,024	63·9
Western Slopes—North ...				1,902	1,144	60·1	1,663	856	51·5
Central ...				2,051	1,290	62·9	2,070	1,358	65·6
South ...				2,130	1,417	66·5	2,206	1,563	70·9
Total ...				6,083	3,851	63·3	5,939	3,777	63·6
Plains—North ... ..				2,015	1,268	62·9	1,613	738	45·8
Central ...				2,659	1,600	60·2	2,337	1,255	53·7
Riverina ...				3,237	2,170	67·5	3,174	2,213	69·7
Total ...				7,911	5,038	63·7	7,124	4,206	59·0
Western Division ...				3,148	1,803	57·3	2,698	1,223	45·3
Grand Total				20,649	12,996	62·9	19,132	11,338	59·3

*Breeds of Sheep.*

The principal breed of sheep in New South Wales is the celebrated merino. Stud merino flocks are maintained throughout the State and a register is compiled annually giving the history of the flocks, together with the breed of the rams used, the number of sheep sold, and particulars of sheep purchased. Most of the flocks maintained for breeding purposes are registered. At 31st December, 1935, there were over 993,000 stud sheep in the 246 registered flocks, comprising 124,000 rams, 581,000 ewes and 288,000 lambs. In that year 139,880 stud rams and 157,555 stud ewes were bred.

Sheep of other pure breeds are not numerous. British breeds of sheep, in numerical importance in 1936, were the Border Leicester (114,690), Romney Marsh (61,209), Dorset Horn (14,289), Southdown (9,772) and limited numbers of Suffolk, English Leicester, Lincoln, Ryland and Shropshire.

Crosses of long-woolled breeds with the merino constitute a relatively small proportion of the sheep in New South Wales, but increasing interest in fat lamb raising for the expanding export trade has resulted in more sheep of this type being depastured.

The Corriedale, which numbered rather more than 75,000 in 1920 and 330,539 in 1936, is a breed founded concurrently in Australia and New Zealand about 1875-80. It is an inbred half-bred between the Lincoln and the merino, and is proving very valuable as a dual purpose (wool and mutton) sheep, well suited to all but the hotter and drier areas of the State. Polworth, a breed evolved in Victoria about 1885, may be termed a fixed comeback, merino rams being mated to Lincoln by merino ewes and the progeny inbred. Popular in the western districts of Victoria, it is becoming established in eastern and central Riverina. The Polworth is considered an ideal farmers' sheep, having a better carcass than the merino and producing a very saleable wool of comeback type.

The proportion of crossbred and comeback sheep was about 7 per cent. in 1901, prior to the development of the mutton export trade, but increased to about 30 per cent. in 1919. Thereafter, on account of the more favourable market for merino wool, there was a substantial decline, but over the past ten years crossbred and comeback sheep have generally represented about 15 per cent. of the total.

The numbers of the principal breeds in the State at 31st March, 1936, were, 43,930,000 merino, 574,000 other pure breeds, 2,900,000 merino comebacks, and 4,532,000 crossbreds.

*Production of Wool.*

Wool is produced in New South Wales principally by shearing the live sheep, but also to a considerable extent by fellmongering. Comparatively little is picked from the carcasses of dead sheep on the holding. Many sheep skins are exported oversea and interstate, and the quantity of wool on these is estimated and included in the total production.

Formerly considerable numbers of sheep were washed before being shorn, and, as particulars of the resultant wool were not recorded separately prior to 1876, the estimates of the quantity of wool produced up to that date are approximate.

The output of wool is stated as in the grease, as data as to its clean scoured yield are not available. A small proportion of the shorn wool is scoured before being marketed, and the whole of the fellmongered wool is

in a scoured condition. For the purpose of estimating the greasy equivalent of that part of the clip marked as scoured wool, it is usual to take 2.1-6 lb. of greasy as equivalent to 1 lb. of scoured wool. Very little wool is now washed on holdings.

The following table shows, in quinquennial periods since 1876 and annually during the past twelve seasons, the total quantity of wool produced (as in the grease) in New South Wales, together with the aggregate value at Sydney, and the value to growers since 1924-25:—

Period:	Wool Produced (000 omitted).		Season.	Wool Produced (000 omitted):		
	Quantity as in the Grease.	Value at Sydney.		Quantity as in the Grease.	Value at Sydney.	Value at Place of Production.
	lb.	£		lb.	£	£
Av. 1876-1880	143,679†	6,260	1924-25	369,118	35,989	34,073
„ 1881-1885	188,763†	8,113	1925-26	402,490	28,216	26,223
„ 1886-1890	258,956†	8,955	1926-27	499,320	35,629	33,234
„ 1891-1895	362,726†	9,805	1927-28	443,860	36,064	33,874
„ 1896-1900	281,648†	8,597	1928-29	482,920	33,206	30,879
„ 1901-1905	260,517†	9,344	1929-30	459,970	20,123	18,099
„ 1906-1910	369,321†	14,953	1930-31	427,220	15,486	13,705
„ 1911-1915	357,556	15,468	1931-32	501,648	17,349	15,233
„ 1916-1920*	328,065	18,507	1932-33	532,080	18,845	16,659
„ 1921-1925*	323,635	24,272	1933-34	484,390	31,889	29,951
„ 1926-1930*	457,712	30,648	1934-35	494,981	19,827	18,045
„ 1931-1935†	488,064	20,679	1925-36	472,585	27,321	25,408

\* Years ended 30th June.

† Years ended 31st March.

‡ Excludes wool exported on skins.

A decline occurred in production between 1911 and 1920 on account of diminution in the number of sheep due to unfavourable seasons. After the breaking of the severe drought in June, 1920, the seasons were favourable up to 1927. The wool production of 1926-27 was more than 23 per cent. greater than in any previous year. Despite relatively unfavourable seasons in 1927-28 and 1929-30 the production of wool remained at a high level. A temporary decrease in 1930-31, after a dry season, was followed by a production in 1931-32 which exceeded 500,000,000 lb. for the first time on record, and of 532,000,000 lb. in 1932-33; but subsequently, owing to less favourable meteorological conditions, production declined by nearly 13 per cent. to 472,585,000 lb. in 1935-36 after a very slight increase between 1933-34 and 1934-35.

The value of the output increased under the influence of a marked rise in prices until in the season 1924-25 an average price of 25½d. per pound was realised for greasy wool at the Sydney wool sales. In the four succeeding seasons the prices were about one-third below this level, except for a temporary rise in 1927-28. A marked decline then occurred in consonance with the general fall in world price levels, the average greasy price receding

to 10½d. per lb. in 1929-30, and was 8½d., 8½d., and 8½d. per lb. in successive following years. Limited world supplies and speculative buying caused a sharp rise to 18d. per lb. in January, 1934. Values averaged 15½d. per lb. (greasy) in 1933-34 but again receded to 9½d. per lb. in 1934-35 when the value of production reached only 60 per cent. of that in 1933-34. Wool prices were higher and very stable the following year, averaging 14d. per lb. (greasy) and though the clip was 4½ per cent. smaller, its value was over 40 per cent. higher than in 1934-35. The course of wool prices is traced at page 609.

Particulars of the number of sheep shorn, the average weight of wool per sheep, and the respective amounts of shorn and other wool produced in certain years since 1916-17, with quinquennial averages since 1920-21, are given as follows:—

Year ended 30th June.	Sheep shorn during year.	Average clip per sheep (greasy). †	Weight of Wool Produced (as in the grease).				
			Shorn and crutched.	Dead.	Fell- mongered.	Exported on skins.	Total produc- tion.
	Thousands.	lb.	Thousand lb.				
1917	35,920	7·8	280,169	998	31,074	6,000	318,241
Ay. 1921-25	38,378	7·5	286,786	925	23,599	12,325	323,635
„ 1926-30	50,944	8·2	418,405	985	18,548	19,774	457,712
„ 1931-35	53,691	8·2	438,594	1,035	34,109	14,326	488,064
1926	45,550	8·1	368,739	761	14,780	18,210	402,490
1927	51,880	8·8	456,872	680	22,330	19,440	499,322
1928	53,730	7·5	404,375	1,705	19,870	17,910	443,860
1929	50,300	8·8	445,228	862	16,770	20,060	482,920
1930	53,260	7·8	416,813	917	18,990	23,250	459,970
1931	48,840	7·9	385,105	585	22,740	18,790	427,220
*1932	52,240	8·7	454,764	404	34,875	11,605	501,648
*1933	55,612	8·6	478,703	459	39,663	13,255	532,080
*1934	56,878	7·5	427,959	2,428	42,909	11,094	484,390
*1935	54,884	8·1	446,437	1,301	30,356	16,887	494,981
*1936	55,805	7·7	429,701	2,358	24,176	16,350	472,585

\* Year ended 31st March.

† Including Crutchings.

### *Average Weight of Fleece.*

Whilst the long-term trend has been definitely in the direction of an increase in the average weight of the fleece—amounting to more than 1½ lb. per sheep since the quinquennial period ended 1891—there is considerable fluctuation from year to year which is accounted for by seasonal vicissitudes, and to a degree, by changes in the proportion of lambs in the flock constitution. Thus the lower average weight per sheep of the clip in the last three years under review may be attributed principally to the protracted dry periods experienced over considerable areas within the State in those seasons.

Shearing operations are carried out usually between May and November, and the average weight of the fleece varies very greatly under the influence of the seasonal conditions ruling during the period in which the wool is grown. The proportion of lambs and of merino sheep in the flocks are important factors affecting the average weight of the fleece. The average weight of fleece shorn in successive years is shown below in statistical divisions of New South Wales:—

Division.	1932-33.†		1933-34.†		1934-35.†		1935-36.†	
	Sheep.	Lambs.	Sheep.	Lambs.	Sheep.	Lambs.	Sheep.	Lambs.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Coastal ... ..	9.23	2.89	7.99	2.68	8.46	2.30	7.85	2.50
Tablelands—North ... ..	8.28	3.03	7.31	2.36	7.78	2.90	7.02	3.57
Central ... ..	9.05	2.62	7.79	2.49	8.58	2.18	8.10	2.12
South ... ..	9.19	1.85	8.06	1.59	9.11	1.45	8.16	1.35
Total ... ..	8.87	2.38	7.73	2.20	8.49	1.94	7.84	1.88
Western Slopes—North ... ..	8.45	3.17	7.53	2.75	7.71	2.51	7.16	2.57
Central ... ..	9.33	3.22	8.27	2.81	8.49	2.56	8.15	2.54
South ... ..	9.24	3.00	7.58	2.47	8.70	2.37	8.40	2.79
Total ... ..	8.98	3.11	7.75	2.65	8.29	2.47	7.90	2.67
Plains—North ... ..	9.24	4.12	8.05	3.70	8.53	3.47	7.97	3.43
Central ... ..	10.10	3.90	8.51	3.40	9.32	2.97	8.53	2.99
Riverina ... ..	9.79	3.24	8.07	2.46	9.61	2.47	8.95	2.74
Total ... ..	9.74	3.61	8.20	2.89	9.21	2.84	8.55	2.95
Western Division ... ..	10.65	3.94	8.64	3.12	10.38	2.87	9.43	3.25
New South Wales ... ..	9.42	3.35	8.00	2.73	8.88	2.59	8.26	2.75

† Total shearing for year ended 31st March.

The wool produced by crutching operations is excluded in all years. This wool represents a variable proportion ranging up to 3 per cent. of the total wool clip.

#### *World's Sheep and Wool Production.*

The numbers of sheep for the latest year available in respect of the principal countries are shown in the table following, together with the approximate wool production for the years 1924, 1933 and 1934. The wool production figures for 1924 have been extracted from publications of

the League of Nations, and the balance of the particulars have been obtained from reports of the Imperial Economic Committee and publications of a more or less official character.

Principal Countries.	Sheep.		Production of Greasy Wool.		
	Year.	Number.	1924.	1934-35.	1935-36.
		'000.	'000 lbs.	'000 lbs.	'000 lbs.
Australia ... ..	1935	108,600	776,900	1,015,400	992,000
New Zealand ... ..	1935	29,000	246,700	276,000	317,000
United States ... ..	1935	52,200	295,500	451,000	452,700
Canada ... ..	1935	3,400	15,200	19,500	19,400
Argentina... ..	1935	38,000	322,100	370,000	350,000
Uruguay ... ..	1935	16,000	97,000	117,000	112,000
Brazil ... ..	1934	12,200	26,000	36,400	39,500
Union of South Africa ...	1935	37,400	176,000	222,000	251,000
Algeria ... ..	1935	5,800	38,100	41,000	43,000
Soviet Union ... ..	1935	55,600	287,000	141,000	163,000
India, British ... ..	1935	50,000	99,200	100,000	100,000
China ... ..	1935	34,000	71,200	110,000	110,000
United Kingdom ... ..	1935	25,100	98,100	115,000	109,000
Spain ... ..	1933	19,100	79,800	73,000	66,000
France ... ..	1935	9,600	44,100	52,800	52,700
Germany ... ..	1935	3,900	53,100	32,200	36,300
Roumania ... ..	1935	11,800	60,000	43,000	42,900
Italy ... ..	1936	8,900	35,300	36,000	41,000
Yugoslavia ... ..	1935	9,200	26,700	30,100	31,000
Other ... ..	1935	165,200	340,000	386,000	439,400
World Total ... ..	...	695,000	3,188,000	3,667,400	3,767,900

According to the totals shown above, Australia's proportion of the world totals are calculated at approximately 15.6 per cent. of the sheep and 26.3 per cent. of the wool. It has been estimated that about 50 per cent. of the world's wool is produced within the British Empire.

#### WOOL MARKETING.

For many years the whole of the wool grown in New South Wales was shipped for sale in London. As the number of continental buyers increased, however, there developed a tendency, which harmonised entirely with Australian interests, to seek supplies of the raw material at their source, and after the year 1885 local wool sales began to assume importance.

#### *Sydney Wool Sales.*

Sydney is now the largest primary wool market in the world. Wool sales usually commence about September and continue in series on fixed dates over a period of eight or nine months. These sales are attended by representatives of firms from practically every country in which woollen goods are manufactured extensively. From data at present available it is not possible to state what proportion of the wool received in Sydney is sold locally before export.

The following statement compiled from the records of the Sydney Wool Selling Brokers' Association shows particulars of Sydney wool sales since 1920-21:—

Season.	Wool Sold.*		Proportion of Wool of each Description Sold.						Average weight per Bale.	
	Weight.	Value.	Breed.		Growth.		Condition.		Greasy.	Scoured. †
			Merino.	Cross-bred.	Fleece, etc.	Lambs.	Greasy.	Scoured.		
	lb.000	£000	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	lb.	lb.
1920-21	107,584	5,610	89.1	10.3	98.9	1.1	93.2	6.8	340	227
1921-22	313,886	14,755	73.2	26.8	95.7	4.3	90.7	9.3	330	240
1922-23	268,873	13,922	79.0	21.0	94.3	5.7	93.3	6.7	321	234
1923-24	224,719	21,445	83.9	16.1	96.6	3.4	92.6	7.4	318	228
1924-25	212,664	22,624	85.9	14.1	94.7	5.3	95.1	4.9	327	232
1925-26	345,685	23,776	86.6	13.4	93.7	6.3	95.2	4.8	315	227
1926-27	374,925	26,377	87.9	12.1	94.9	5.1	94.1	5.9	322	208
1927-28	338,476	26,885	90.3	9.7	95.3	4.7	93.7	6.3	306	226
1928-29	356,696	25,113	88.6	11.4	96.0	4.0	95.0	4.1	313	236
1929-30	342,084	14,888	90.1	9.9	95.5	4.5	95.7	4.3	305	231
1930-31	331,476	11,743	90.1	9.9	96.5	3.5	94.9	5.1	309	225
1931-32	378,006	12,727	90.0	10.0	94.5	5.5	94.0	6.0	308	230
1932-33	417,443	14,358	90.1	9.9	94.0	6.0	91.8	8.2	311	236
1933-34	347,587	21,974	90.0	10.0	95.4	4.6	91.5	8.5	304	237
1934-35	387,531	15,359	90.3	9.7	95.2	4.8	93.7	6.3	307	230
1935-36	364,656	20,517	90.4	9.6	95.1	4.9	92.8	7.2	296	230
1936-37	388,181	25,980	91.1	8.9	95.3	4.7	94.6	5.4	303	235

\* Scoured being included at its greasy equivalent.

† Including skin wool.

The figures as to quantity and value in this table are not comparable with records of production, because considerable quantities of wool grown in New South Wales are sold in other States, notably in Victoria and South Australia, while small quantities of wool from the other States, mainly from Queensland, are marketed in Sydney. The wool produced in any season is not always sold in the same season. The uncertainty consequent on the outbreak of war caused a heavy decline in sales during 1914-15, and sales were retarded again on the resumption of auctions in 1920-21, owing to the existence of large stocks and to uncertain conditions. At the close of sales in June there is usually very little wool remaining unsold in Sydney. The balance remaining unsold in store on 30th June has not been appreciable since 1925, when 171,700 bales remained unsold. Unsold wool in store in Sydney in successive years since 30th June, 1934, totalled 64,861 bales, 47,408 bales, 33,027 bales, and 29,292 bales.

Particulars of the appraisalment and purchase of wool under the Imperial Wool Purchase Scheme which operated during the years 1916-17 to 1919-20 were published in earlier editions of this Year Book.

Sydney is by far the largest wool-selling centre of Australia, the quantity sold at Sydney wool sales being, usually, greater than at the two centres next in importance (Brisbane and Melbourne) combined. Wool is sold also at Albury, on the southern border, and (since 1929-30) at Newcastle, but these sales are comparatively small in extent.

#### *Wool Publicity and Research.*

Following upon a resolution passed on 25th June, 1927, at a joint conference of the Australian Woolgrowers' Council and the National Council of Wool Selling Brokers of Australia, a fund has been established to promote pastoral research. A voluntary contribution of 2s. per bale of the 1928-29 clip was invited and to June, 1929, the total receipts amounted to £40,284. The Australian Pastoral Research Trust Limited was registered as a company with an initial capital of £43,000. At 31st March, 1937, the capital funds in the hands of the Trust totalled £53,940. Its objects are to promote the growth, development, and best interests of the pastoral and grazing industry by any means, especially through scientific and economic research relating in particular to stock diseases, animal pests,

harmful plant life, and edible plants. The work of the Trust is co-ordinated with that of the Council for Scientific and Industrial Research and is described fully in the annual reports of both organisations.

During the year ended 31st March, 1937, an amount of £3,201 was expended on research, making a total research expenditure of £15,608 since the inception of the Trust.

#### *Australian Wool Board.*

Increasing stock losses through disease and malnutrition and the spectacular rise and intensified competition of the rayon and other industries using artificial fibres have led to the inauguration of a wool publicity and research campaign for the prosecution of which it has been found impossible to secure adequate funds by voluntary effort. As an outcome, the Commonwealth Parliament passed legislation giving effect to a scheme under which woolgrowers pay a tax on all wool marketed, the proceeds being applied to popularise the consumption of wool, and to carrying out research into means for attaining greater efficiency in its production and treatment.

Assent was given to the Wool Publicity and Research Act on 28th May, 1936. The Act will remain in operation until 31st May, 1941, and will continue thereafter unless a poll of producers requisitioned in the first six months of 1940 by at least 10 per cent. of the growers, owning in the aggregate at least 15 per cent. of the sheep in Australia, indicates that discontinuance of the Act is desired.

An Australian Wool Board of seven members (six nominated by the Australian Woolgrowers' Council and one Government representative) is constituted under the Act as a body corporate, with power to make any arrangements which, in its opinion, are likely to be conducive to the improvement of the production of wool in Australia, and the increase and extension, by publicity and research or any other means, of the use of wool throughout the world. Proceeds of the tax under the Wool Tax Act, 1936, are to be paid to the credit of the Wool Publicity and Research Fund, and will be at the disposal of the Board. The rate of tax is as prescribed by regulation, but a statutory maximum of 6d. per bale, 3d. per butt or fadge, and 1d. per bag has been fixed. The rate of tax for the 1936-37 season was at the maximum rates quoted.

Under the Wool Tax Assessment Act, 1936, all wool grown in Australia and shorn on or after 1st July, 1936, was made subject to the tax. An amendment provides that the tax shall be paid on all greasy wool (other than dead wool) received for sale by a broker, or received for scouring by a wool-scourer, or purchased otherwise than from a wool-scourer by a manufacturer who uses wool in his business. If wool is exported by a dealer he is responsible for the tax. An owner exporter must pay the tax prior to the wool being placed on board ship. The amount collected in Australia in 1936-37 under the Wool Tax Act, 1936, was £72,805, of which £36,616 was paid in New South Wales.

Similar legislation has been enacted in South Africa and New Zealand, and at a conference held in Melbourne from 14th to 20th January, 1937, between the Australian Wool Board and representatives of the wool industry of those countries the establishment of an International Wool Publicity and Research Fund, an Executive Committee comprising one or two representatives of each constituent council, and a Secretariat for the administration of the Fund was decided upon. It is expected that decisions as between the contributing Councils will be reached without the necessity of a meeting of the Executive, while each Council will retain full control over the amount contributed by the requirement of unanimity in all important decisions.

\* Each of the three countries has a representative on the Secretariat. Contributions will be based on the average quantity of wool exported over a period of five years (making the Australian quota approximately 62 per cent.) and the Fund came into operation as from 1st July, 1937.

The authority in each country is to administer internal research and publicity, upon which a considerable proportion of the proceeds of the levy in Australia will be expended. The sum of £22,640 was allocated by the Australian Wool Board for scientific pastoral research in its first year of administration, for investigations including sheep diseases, nutrition, external parasites, fertility work, poison plants and pasture management.

### Prices of Wool.

On account of the very large number of varieties of wool, of the pronounced changes of condition from season to season, and of the varying proportions of each variety in the total output, it is a matter of great difficulty to obtain price quotations which will show accurately the fluctuations of values.

However, it appears that the average values of Australian wool per pound have been subject to alternate periods of rising and falling which, on the basis of average export values from New South Wales, have been as follows:—Rising to 1830, falling 1831 to 1849, rising 1850 to 1861, falling 1862 to 1894, rising 1895 to 1907, falling 1908 to 1912, rising 1912 to 1924, rising 1925 to 1928, falling 1929 to 1933, and rising thereafter. These periods indicate the general trend only, because in certain years, notably 1900, 1914-15, 1921 and 1922 and 1933-34, prices varied irregularly. Though there was a recession from the high level reached in January, 1934, prices have since been well above the low levels of 1930-31 to 1932-33 and have maintained a generally upward trend.

The following statement shows the average prices of greasy wool in New South Wales since 1876. Average prices obtained at Sydney auctions have been recorded by the Sydney Wool Selling Brokers' Association since 1899. Between 1876 and that year the table shows the average value of greasy wool as declared in export returns obtained by the New South Wales Customs. All prices are stated in Australian currency:—

Average Export Value of Greasy Wool f.o.b. Sydney.				Average Price realised for Greasy Wool at Sydney auctions.					
Year ended 31 Dec.	Average Price Per lb.	Year ended 31 Dec.	Average Price Per lb.	Season ended 30 June.	Average Price Per lb.	Season ended 30 June.	Average Price Per lb.	Season ended 30 June.	Average Price Per lb.
	d.		d.		d.		d.		d.
1876	11	1888	8½	1899	7½	1912	8½	1925	25.5
1877	10½	1889	8¾	1900	11½	1913	9½	1926	16.5
1878	10½	1890	8	1901	5½	1914	9½	1927	17.0
1879	9½	1891	7	1902	6½	1915	8½	1928	19.5
1880	10½	1892	7½	1903	8	1916	10½	1929	16.5
1881	10½	1893	6½	1904	9½	1917	14½*	1930	10.5
1882	10½	1894	5½	1905	8½	1918	14½*	1931	8.7
1883	10½	1895	6½	1906	9	1919	15*	1932	8.3
1884	10½	1896	7½	1907	9½	1920	15½*	1933	8.5
1885	8¾	1897	7	1908	9	1921	12½	1934	15.8
1886	8	1898	7½	1909	7½	1922	12½	1935	9.7
1887	8			1910	9½	1923	17½	1936	14.0
				1911	8½	1924	23½	1937	16.4

\* Price as appraised under Imperial Wool Purchase Scheme. The average amount to be added to the value of greasy wool in respect of surplus profits is 7-13d. per lb. of which 3-69d. accrued to Australian growers.

These figures since 1899 represent the average price of wool sold during the year, and furnish an accurate guide to the average value per pound greasy of the clip produced in individual years, except that allowance for carry over of unsold wool is necessary in three seasons, viz.:—The average price realised for wool produced in 1920-21 was 12½d., in 1924-25, 23½d., and in 1925-26, 16½d. The prices shown above are affected over long terms by changes in the proportion of merino to crossbred, and by such variable qualities as length, fineness, and soundness. Over short terms comparison is affected in a small degree by changes in the proportion of natural grease in the wool and by variations in the proportionate quantities of wool of various qualities. The wool sold locally as scoured is of limited range and quantity, and the prices are not sufficiently representative to be of value for comparative purposes.

Data as to the clean scoured prices of principal types of wool have been obtained for successive sales since September, 1924. These have been combined into monthly averages and converted into an index in terms of pence per lb. greasy comparable with the seasonal averages shown above.

#### *Average Monthly Prices of Greasy Wool.*

The averages published below are an index (expressed in terms of pence) of the price of greasy wool per lb. at Sydney auctions. They are based on the actual prices realised for typical grades of wool in Sydney, and the respective monthly averages are comparable very closely with the actual average prices paid for greasy wool in successive seasons.

Month.	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
July ...	(17.6)	(17.8)	(12.9)	(9.7)	(8.3)	(8.0)	(11.4)	(11.0)	(11.6)	(13.3)
August ...	(17.9)	17.8	(12.4)	(9.6)	(7.5)	(8.5)	(11.6)	(10.5)	(11.4)	(13.5)
September ...	18.2	17.8	12.0	9.4	7.5	9.1	13.1	9.4	12.1	13.1
October ...	18.7	16.9	10.7	8.2	9.0	8.5	12.8	9.4	12.4	14.0
November ...	18.7	17.3	12.2	8.4	9.7	8.2	14.5	9.4	12.9	16.2
December ...	19.1	16.9	11.7	7.9	8.5	8.4	14.9	9.1	13.0	16.6
January ...	19.6	17.3	10.7	7.7	8.9	8.6	17.7	9.4	13.9	18.0
February ...	20.0	16.9	9.7	9.0	8.7	8.0	16.7	8.7	14.4	17.2
March ...	20.0	16.0	9.2	10.2	7.9	7.8	15.9	8.6	14.6	17.8
April ...	20.0	15.6	9.8	10.3	7.5	7.9	(15.4)	9.5	(14.6)	18.6
May ...	20.0	14.7	10.3	9.7	7.4	8.8	13.5	10.6	14.5	(18.3)
June ...	17.8	12.9	9.9	9.0	7.3	10.0	(12.1)	11.1	13.1	17.2
Weighted Average price at Sydney auctions ...	19.5	16.5	10.5	8.7	8.3	8.5	15.8	9.7	14.0	16.4

Averages shown in brackets are nominal, being estimates made on various data in the absence of sales. All prices are stated in Australian currency. The table discloses considerable fluctuation in the price of wool within seasons. The years of greatest variation in prices were 1928-29 when, with the advent of the depression, prices declined rapidly, and in 1933-34 under the erratic movements referred to at an earlier page. The range in prices was again considerable in 1936-37, the Japanese embargo against Australian wool affecting values in the opening months of the season, after which

devaluation of the French franc, increased demand due to progress of world economic revival, and the subsequent return of Japanese buyers raised values to a new post-depression high level.

*British Australian Wool Realisation Association Limited.*

Particulars of the formation and activities of this organisation which was liquidated on 15th September, 1932, are contained in the Year Book for 1921 at page 781 and for 1924 at page 586. A summary of payments made to woolgrowers was published on page 630 of this Year Book for 1928-29, and information as to the final distribution made in March, 1932, appeared at page 763 of the 1933-34 issue. The total receipts of growers under the appraisalment section was equivalent to 19.19d. per lb.

*Destination of Wool Shipped.*

The following statement shows the destination of the oversea shipments of wool (excluding wool on skins) from New South Wales. The figures relate to the cargoes actually despatched during the periods specified:—

Destination.	Oversea Exports of Wool (000 omitted).								
	Greasy.			Scoured.			Tops.		
	1920-21.	1930-31.	1935-36.	1920-21.	1930-31.	1935-36.	1920-21.	1930-31.	1935-36.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
United Kingdom ...	80,322	76,084	79,020	18,164	6,123	8,850	422	...	558
Canada ...	127	...	317	60	141	878	287	779	1,897
Austria ...	734	...	2,219	293	...	543	...	...	...
Belgium ...	12,144	37,834	51,401	3,362	3,174	5,811	...	...	...
France ...	19,203	73,053	30,724	974	4,054	6,578	...	...	...
Germany ...	5,174	50,353	13,507	185	2,270	1,291	...	...	...
Italy ...	6,443	15,326	2,018	12	325	80	...	...	...
Japan ...	6,179	69,389	103,466	70	1,057	459	2,466	30	...
Netherlands ...	22	247	5,671	6	25	325	...	...	...
Russia ...	...	...	...	...	...	...	...	...	...
United States ...	15,236	10,343	12,487	3,217	54	21	1,344	35	16
Other Countries ...	3,007	1,973	12,570	68	140	1,771	761	...	24
Total ...	149,091	334,602	313,409	26,411	17,372	26,607	5,280	844	3,095

The approximate greasy equivalent of wool exported according to country of destination is indicated in the next table, in which the relative importance of each country as a market for wool exported direct from this State is also shown. There have been striking changes in the distribution of exports. Japan moved up from fifth place in 1920-21 to the leading position in 1935-36, illustrating the rapid expansion of woollen manufacture in that country, whilst the distribution of exports has become much wider—a development which until recently was distinctly favourable to satisfactory marketing results. But latterly the broader disposition of exports has derived largely from efforts in many lands to attain greater economic self-sufficiency. In so far as steps to achieve that end have been fostered by restrictions upon trade in manufactured woollen goods, resulting in higher prices to consumers, and intensified by lack of the means to acquire raw material supplies in some countries, encouragement has been given to the evolution and use of substitute synthetic fibres. Consequently, in a long

range view, the altered basis of the export trade is not without elements of danger to the wool-growing industry, although, up to the present, no serious disposal problem has arisen.

Importing Country.	Exports of Wool—Greasy, Scoured and Tops. (Approximate Greasy equivalent.)							
	Quantity Exported.				Proportion of Total.			
	1920-21.	1928-29.	1934-35.	1935-36.	1920-21.	1928-29.	1934-35.	1935-36.
	000 lb.	000 lb.	000 lb.	000 lb.	Per cent.	Per cent.	Per cent.	Per cent.
United Kingdom	120,591	87,270	123,227	99,536	55.4	22.8	31.6	26.3
Canada ... ..	879	871	6,163	6,329	.4	.2	1.6	1.7
Austria ... ..	1,369	...	3,170	3,396	.6	...	.8	.9
Belgium ... ..	19,428	59,650	65,503	63,991	8.9	15.6	16.8	16.9
France ... ..	21,313	82,418	47,925	44,980	9.8	21.6	12.3	11.9
Germany ... ..	5,575	56,798	13,951	16,305	2.6	14.8	3.6	4.3
Italy ... ..	6,269	15,922	9,343	2,192	2.9	4.2	2.4	.6
Japan ... ..	11,674	63,768	88,378	104,461	5.4	16.7	22.7	27.6
Netherlands ...	735	49	11,443	6,376	.3	.1	2.9	1.7
United States ...	25,118	6,893	3,799	12,566	11.5	1.8	1.0	3.3
Other Countries	4,803	8,527	17,140	17,832	2.2	2.2	4.3	4.8
Total ...	217,754	382,166	390,042	377,964	100.0	100.0	100.0	100.0

#### Index of Rainfall in Sheep Districts.

The following table provides a monthly index of rainfall in the sheep districts of New South Wales. The index represents the weighted average ratio of actual to normal rainfall each month, normal in each month being the average over a long period of years and represented by 100:—

Month and Season.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
<i>Spring—</i>																	
Sept.	181	127	83	105	143	36	117	59	96	79	46	82	166	101	88	142	61
Oct.	118	102	76	81	103	43	43	133	71	83	207	46	63	131	271	128	46
Nov.	96	80	15	63	311	149	14	152	40	100	83	119	117	208	108	31	14
<i>Summer—</i>																	
Dec.	195	177	153	129	83	53	137	85	27	86	106	135	54	142	76	92	200
Jan.	76	68	43	71	163	95	118	140	23	75	55	17	126	130	115	173	122
Feb.	91	76	10	185	102	26	19	302	145	43	37	91	17	274	87	161	70
<i>Autumn—</i>																	
March	141	18	32	47	63	247	59	157	72	64	255	152	44	22	21	146	124
April	171	81	27	125	16	216	101	128	151	68	210	157	86	106	143	55	33
May	206	42	46	42	206	160	46	46	23	90	280	57	86	15	28	69	42
<i>Winter—</i>																	
June	164	57	201	75	125	78	48	94	40	154	103	59	69	74	30	84	71
July	163	165	137	96	86	74	35	123	20	119	94	85	150	165	103	197	36
Aug.	78	47	45	127	101	78	50	19	102	121	43	101	51	136	59	98	113
Spring	131	103	58	86	186	76	59	115	69	87	112	82	115	167	176	100	40
Summer	121	107	60	123	118	57	91	190	65	68	86	81	66	184	93	142	131
Autumn	173	47	35	71	95	208	60	110	82	74	243	122	72	48	64	90	66
Winter	135	90	123	99	104	77	46	79	67	131	110	82	90	125	64	126	71
Season	140	87	72	96	126	104	66	125	68	90	139	92	86	131	99	115	77
Av. Clip per Sheep (Year following)	7.8	7.3	7.1	8.2	8.1	8.8	7.5	8.8	7.8	7.9	8.7	8.6	7.5	8.1	7.7	...	...

The average weight of wool per sheep shorn in each next succeeding year has been shown at the foot of the foregoing table. It is clearly indicated that there is a close relationship between rainfall and the weight of

the fleece; years of poor rainfall almost invariably resulting in a decline in the quantity of wool shorn per sheep. Whilst reasonable seasonal conditions throughout the year are needed for good results, it would appear that Summer and Autumn rains exercise a very considerable influence upon wool production. Thus, a deficiency of rainfall in the Summer and Autumn of 1919-20 and 1922-23 was followed by the lightest clips in the years under review, whilst bounteous rains in those seasons of the year in 1925-26, 1927-28, and 1930-31 preceded higher weights per fleece than in any other year. Though over the whole season rainfall was below average in 1923-24 and 1931-32, the occurrence of moderately good rains in the Summer and Autumn of those years seems to have gone far in maintaining the weight of the fleece shorn in the next succeeding years.

# CATTLE.

Apart from dairying, industries connected with cattle, such, for instance, as the export of beef, have never existed on a large scale in New South Wales. Local production scarcely meets the requirements of local consumption, and only the import of cattle from Queensland enables the maintenance of a small export trade in frozen and tinned beef. From 1916 to 1922 an appreciable increase was apparent in the number of cattle depastured on account of favourable prices for beef, and the number in 1922 (3,546,530) constituted a record for the State.

Subsequently the continuance of unfavourable markets led to a diminution in herds; breeding operations were curtailed, importation of live stock from Queensland was very restricted, and the herds were heavily depleted. In recent years, however, renewed interest has been taken in the breeding of cattle for beef for export owing to the marketing developments discussed at a later page. Whereas, between 1922 and 1930, the number of cattle in the State, exclusive of cows and heifers in registered dairies, declined from 2,659,808 to 1,726,638, or by 35.1 per cent., there was an increase over the five years ended 1934-35 in the number of such cattle of 582,430, representing a gain of 33.7 per cent. Heavy slaughtering and a much reduced net import from other States caused a decline in numbers in 1935-36 of 78,084, exclusive of cows and heifers in registered dairies.

The following table shows the total number of cattle in the State, including dairy cattle, at various dates:—

Year.	Cattle.	Year.	Cattle.	Year.	Cattle.
1861	2,271,923	1906	2,549,944	1929*	2,784,615
1866	1,771,809	1911	3,194,236	1930*	2,686,132
1871	2,014,888	1916	2,405,770	1931*	2,840,473
1876	3,131,013	1921*	3,375,267	1932†	2,993,586
1881	2,597,348	1925*	2,876,254	1933†	3,141,174
1886	1,367,844	1926*	2,937,130	1934†	3,361,771
1891	2,128,838	1927*	2,818,653	1935†	3,482,831
1896	2,226,163	1928*	2,848,654	1936†	3,388,538
1901	2,047,454				

\* At 30th June.

† At 31st March.

Particulars of cattle according to sex and age at 31st March, 1936, and in certain earlier years for which comparable data are available, are shown below:—

As at 31st March.	Bulls 3 years and over.	Cows and Heifers.			Bullocks and Steers.	Calves under 1 year.	Grand Total.
		In Registered Dairies.	Other.	Total.			
1923*	40,530	878,762	753,652	1,632,414	1,089,129	489,107	3,251,180
1924*	38,045	864,455	671,365	1,535,820	991,265	373,392	2,938,522
1930*	42,456†	959,494	667,259	1,626,753	558,713	458,210	2,686,132
1931*	45,038†	1,006,129	705,372	1,711,501	614,244	469,690	2,840,473
1932	49,846†	1,055,729	768,144	1,823,873	589,794	530,073	2,993,586
1933	52,922†	1,124,006	833,472	1,957,478	562,894	567,880	3,141,174
1934	54,786†	1,155,800	916,227	2,072,027	670,485	564,473	3,361,771
1935	55,028†	1,173,763	969,832	2,143,595	668,615	615,593	3,482,831
1936	55,354†	1,157,584	976,089	2,133,673	625,795	573,716	3,388,538

\* At 30th June.

† Bulls over 1 year old.

This summary shows that there was a substantial decrease in herds until 1930, due principally to declining numbers of bullocks and steers. In each of the next five years cattle increased in number for breeding, dairying and slaughtering purposes, and at 31st March, 1935, the grand total was within about 2 per cent. of the highest ever recorded (1922) and 29.7 per cent. greater than in 1930. A further slight increase in the number of bulls suggests that the decline in 1935-36, the main factors in which are indicated above, was incidental rather than a reversal of the general trend. Between 1930 and 1935 the number of bulls increased by 29 per cent., of cows and heifers by 31.8 per cent., of bullocks and steers by 19.7 per cent., and of calves by 34.4 per cent., reflecting expansion of the dairying industry and increased interest in the production of stock for slaughter. The growth in the number of calves is attributable largely to the development of a market for vealers, which has resulted in the rearing on dairy holdings of calves which formerly would have been killed shortly after birth.

### Calving.

In the years prior to 1932 information as to the number of calves dropped during each year was collected. According to the returns the number averaged 893,719 per annum in the five years ended 1924-25 and 897,771 in the years 1925-26 to 1929-30, reaching a peak of 947,442 in 1930-31. But because of unsatisfactory features which rendered the return of doubtful value, the collection has been discontinued.

The following statement, showing the number of calves slaughtered, and the number surviving at the end of each year, indicates that during the last few years the raising of calves has extended materially:—

Year ended 30th June.	Calves.		Year ended 30th June.	Calves.		Year ended 31st March.	Calves.	
	Slaught- ered.	Surviving at end of Year.		Slaught- ered.	Surviving at end of Year.		Slaught- ered.	Surviving at end of Year.
Av. 1921-25	120,134	486,933	1928	144,850	421,654	1932	163,934	530,073
„ 1926-30	158,158	444,747	1929	161,994	455,529	1933	208,895	567,880
1925	159,999	422,736	1930	163,195	458,210	1934	270,466	564,473
1926	173,806	458,936	1931	154,684	469,690	1935	370,739	615,593
1927	146,947	429,405				1936	443,761	573,716

As more than one-half of the cows in the State are in registered dairies; and their progeny is generally not available for beef purposes, the beef stock of the State is augmented mainly from the interior divisions and by imports from Queensland. Until about 1930-31 about 90 per cent. of bull calves and 70 per cent. of the heifer calves in the dairying districts were killed shortly after birth and not used for human consumption. In recent years, however, dairy farmers have found a market for young calves as carcase butchers have operated in the principal districts, slaughtering locally and consigning the meat to the metropolis. These new activities are reflected in the much heavier calf slaughtering during the past five years and the increased number of calves maintained on holdings.

### *Interstate Movements of Cattle.*

By reason of the existence of diseases among the cattle of certain districts, notably the presence of cattle tick in the north-east of New South Wales and in parts of Queensland, the interstate movement of cattle is closely regulated in order to stay the spread of disease. In certain cases cattle are quarantined, dipped or sprayed on admission and subjected to special treatment should such become necessary within a fixed period thereafter.

The following statement shows the number of live cattle (so far as recorded) passing into and out of New South Wales during each of the last six years in comparison with the yearly average for the quinquennial periods ended 1929-30 and 1934-35. The movement is practically all overland, comparatively few cattle being transported by sea:—

Year. ended 30th June.	From New South Wales.				To New South Wales.			
	To Victoria.	To Queens- land.	To South Australia and by Sea.	Total.	From Victoria.	From Queens- land.	From South Australia and by Sea.	Total.
Av. 1926-30	No.	No.	No.	No.	No.	No.	No.	No.
Av. 1931-35	122,542	23,032	19,207	164,781	36,689	248,028	1,192	285,909
1930-31	105,368	13,522	14,630	133,520	34,991	233,269	1,533	269,793
1931-32	100,564	12,614	20,174	133,352	33,732	240,354	302	274,388
1932-33	143,456	14,770	19,658	177,884	40,507	245,344	571	286,422
1933-34	137,970	13,117	12,512	163,599	29,409	154,462	616	184,487
1934-35	89,176	11,459	6,757	107,392	38,102	264,835	4,060	306,997
1935-36	55,674	15,651	14,051	85,376	33,206	261,348	2,115	296,669
	57,276	33,781	9,386	100,443	48,532	140,953	1,935	191,420

Although the effects of seasonal variations are apparent during this period there is, on the whole, a heavy but fluctuating import of cattle to New South Wales from Queensland, and a considerable export to Victoria. The interchange with South Australia is small.

During the last five years covered in the table there was an excess of imports from Queensland of about 978,164 cattle, and an excess of exports to Victoria amounting to 293,796. The total net gain to New South Wales from all sources was 631,301.

*Increase and Decrease of Cattle.*

The number of cattle in New South Wales varies under the influence of three factors, viz., importation, slaughtering, and natural increase, *i.e.*, excess of calving over deaths from causes other than slaughtering. The operations in these during recent years is shown in part below:—

Year.	Net Imports of Cattle.	Calves reared (surviving at 30th June).	Cattle and Calves died from Disease, Drought, etc.	Cattle Slaughtered (excluding Calves).	Cattle at end of Year.
1923-24	43,231	373,392	*	628,729	2,938,522
1924-25	78,095	422,736	*	658,827	2,876,254
1925-26	184,790	458,939	53,621	652,001	2,937,130
1926-27	54,370	429,405	76,114	665,647	2,818,653
1927-28	249,292	421,654	70,585	549,677	2,848,654
1928-29	66,546	455,529	48,882	617,000	2,784,615
1929-30	50,643	458,210	69,965	517,121	2,686,132
1930-31	141,036	469,690	43,570	440,266	2,840,473
1931-32	108,538	530,073†	58,614	465,481	2,993,586
1932-33	20,888	567,880†	76,747	494,351	3,141,174
1933-34	199,605	564,473†	83,857	494,610	3,361,771
1934-35	211,293	615,593†	71,375	600,698	3,482,831
1935-36	90,977	573,716†	141,006	652,032	3,388,538

\* Not available.

† At 31st March.

The figures shown in the table do not balance from year to year because it is not possible to obtain all necessary data relative to calving and disposal of calves. Nevertheless the table illustrates in a general way the influence of the various factors.

**HORSES.**

There was a great advance in horse breeding between 1910 and 1918, owing to the increased demand which arose as a consequence of widening settlement, prosperous seasons, and defence requirements. During the lengthy drought which terminated in June, 1920, the numbers declined heavily, and the decline continued especially in the five seasons ended 30th June, 1931, owing to the increased use of motors for transport. In the year ended 31st March, 1932, the numbers remained practically stationary, but a slight increase was recorded for the period 1932 to 1936.

The following table shows the number of horses in New South Wales at the end of quinquennial periods from 1861 to 1916, and annually thereafter:—

Year.	Horses.	At 30th June.	Horses.	At 30th June.	Horses.
1861	233,220	1916	719,542	1927	623,392
1866	274,437	1917	733,791	1928	598,377
1871	304,100	1918	742,247	1929	567,371
1876	360,703	1919	722,723	1930	534,945
1881	398,577	1920	662,264	1931	524,512
1886	361,663	1921	663,178	1932*	524,751
1891	469,647	1922	669,800	1933*	528,943
1896	510,636	1923	660,031	1934*	532,028
1901	486,716	1924	658,372	1935*	534,853
1906	537,762	1925	647,503	1936*	542,862
1911	689,004	1926	651,035		

\* At 31st March.

The number of horses in the State reached its maximum of 746,170 in 1913, had fallen to 524,512 in 1931, and thereafter gradually increased again to 542,862 in 1936. Heavier losses by natural causes have been an important factor in limiting the increase in the last few years.

There is a small export trade to India, where the horses are required as remounts for the army. The number of ordinary horses sent there during the year ended 30th June, 1936, was 236, the value being £5,605.

There is comparatively little interstate movement of horses except to and from Queensland, and practically no import by sea. The recorded net import of horses interstate by land in the past six years ended 30th June has been as follows:—1931, 2,845; 1932, 7,877; 1933, 3,506; 1934, 6,284; 1935, 10,474; and 8,728 in 1936. The recorded number of horses which died from disease, drought etc., on rural holdings was 9,411 in 1930-31, 12,382 in 1931-32, 15,799 in 1932-33, 17,920 in 1933-34, 20,755 in 1935, and 21,813 in 1935-36.

### *Horse Breeding.*

Horse breeding operations have decreased since 1913, when the number of foals reared was 79,620. A sudden decrease occurred as a result of the drought which broke in June, 1920, and except for a temporary recovery in 1925 and 1926 the decrease continued until 1931.

The number of foals reached a record low level (20,065) in 1921, but had increased to 39,415 in 1925, falling again to a new low level (16,370) in 1931, when only 23 per cent. of the average annual number of foals in the quinquennium ended 1913 were reared. During the last five years a steady increase has been maintained, and in the twelve months ended March, 1936, the number of foals reared exceeded that in any year since 1918, and was more than two and a half times as great as in 1930-31.

The following table shows the number of foals recorded at the end of certain years since 1909:—

Year ended 31st December.	Foals reared (Surviving at end of year).	Year ended 30th June—	Foals reared (Surviving at end of year).	Year ended 30th June—	Foals reared (Surviving at end of year).	Year ended 31st March—	Foals reared (Surviving at end of year.)
Av. 1909-13	73,182	1920	24,755	1926	36,521	1932	22,559
1915	60,337	1921	20,065	1927	28,282	1933	28,925
1916	41,818	1922	29,685	1928	22,922	1934	34,238
1917	49,087	1923	23,616	1929	19,991	1935	40,839
1918	46,832	1924	24,307	1930	16,716	1936	43,092
1919	40,015	1925	39,415	1931	16,370		

The increased use of motor power on farms and the consequent depreciated value of the horse resulted in the disposal of studs, but latterly animal traction has regained popularity for certain purposes, and there has been a revival in the breeding of utility horses and of efforts toward the improvement of type by the introduction of superior stud animals.

Particulars of power machinery on farms in 1930 were published on page 196 of the official Year Book for 1930-31.

Particulars showing the number, description, and ages of horses in New South Wales as at 30th June, 1930, as collected in conformity with the schedules of the World Agricultural Census, were published at page 770 of the 1933-34 issue of this Year Book.

Of the 534,945 horses in the State at that date, 7,467 were returned as stallions, 265,376 as geldings, and 262,102 as mares. Stud stock numbered 4,685 and racing stock 8,432, and there were 299,409 draught horses, 185,380 light horses, and 37,040 ponies, whilst 472,160 of the total, or 88.3 per cent., were horses aged three years or more.

#### OTHER LIVE STOCK.

Particulars of the number of pigs in the State are shown at the beginning of this chapter, and in the section relating to dairying at page 653.

The recorded number of goats in New South Wales at 31st March, 1936, was 20,519, including 1,830 Angora goats. Under the provisions of the Dog and Goat Act, 1898, the use of dogs or goats for purposes of draught is prohibited.

In New South Wales camels are used principally as carriers on the Western Plains, but their number, though varying from year to year, is tending to decline. The number at 31st March, 1936, was only 509, compared with 1,792 at the close of the year 1913.

Donkeys and mules are not used extensively in New South Wales, the numbers in 1936 being 138 of the former and 45 of the latter. Most of these are situated in the Western Division, where they are used for purposes of transport. Movements across the border cause marked fluctuations in the number in the State.

#### PRICES OF LIVE STOCK.

The following statement shows the average prices of fat stock in the metropolitan saleyards at Flemington during certain recent calendar years in comparison with 1913. The averages stated are the mean of the monthly prices which are published annually in the Statistical Register:—

Stock.	1913.	1928.	1929.	1931.	1932.	1934.	1935.	1936.
<b>Cattle—</b>	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.
Bullocks and steers—Prime	10 18	13 13	15 2	9 12	9 0	8 17	9 15	9 16
medium ... ..	6 19	10 10	11 10	7 11	6 16	6 11	7 9	7 10
Cows and heifers—Prime								
<b>Sheep—</b>	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Crossbred wethers—Prime	19 3	30 5	25 9	13 3	12 7	20 3	19 6	24 5
Crossbred ewes—Prime	15 11	26 7	20 4	10 6	*	16 9	16 0	19 7
Merino wethers—Prime	19 6	30 9	24 8	12 11	11 1	20 4	18 9	22 9
Merino ewes—Prime	17 4	23 9	19 6	10 6	8 9	16 10	16 0	18 10
Lambs and suckers, woolly—								
Prime ... ..	15 4	26 4	22 0	12 9	11 1	19 6	19 0	21 11

\* No quotation.

Prices of live stock vary from year to year partly under the influence of seasonal conditions and of the price of wool. In periods of dry weather fat stock are hastened to market and prices decline, but with the advent of relief rains stock are withheld from market for fattening or breeding and prices rise.

As the foregoing table indicates, live stock values rapidly declined from 1928 to 1932; an experience associated with the agricultural crisis which affected all forms of rural enterprise throughout the world with unprecedented severity. Reflecting the marked recovery in wool values in 1933-34, the market for sheep and lambs has consistently improved (apart from a minor check associated with the recession in the price of wool in 1934-35) and in 1936 average prices for sheep and lambs were about twice those in 1932 and closely approached the averages for the year 1929. Cattle prices, however, have improved only to a limited extent. Increased attention to the meat export trade and improving economic conditions generally assisted in maintaining prices in local markets.

Monthly variations in the prices of typical grades of live stock are shown below:—

Month.	Bullocks and Steers. Prime medium weight.			Crossbred Sheep. Prime wethers.			Prime Lambs and Suckers. (woolly).		
	1934.	1935.	1936.	1934.	1935.	1936.	1934.	1935.	1936.
	£ s.	£ s.	£ s.	s. d.	s. d.	s. d.	s. d.	s. d.	£ s. d.
January ...	8 13	8 11	10 19	19 1	17 4	20 8	18 3	17 11	19 2
February ...	8 19	8 4	10 12	21 10	16 7	22 2	20 0	17 6	19 11
March ...	8 16	7 14	10 9	22 5	14 2	23 10	19 6	16 2	20 7
April ...	8 8	8 3	8 19	21 8	15 8	24 7	20 0	15 11	20 10
May ...	8 0	8 6	8 11	22 0	18 11	25 0	19 9	18 3	20 5
June ...	7 17	8 9	8 18	21 8	21 0	25 10	21 1	18 2	20 3
July ...	8 11	9 16	9 11	23 11	24 0	29 9	21 9	20 0	22 8
August ...	9 9	10 13	10 4	22 3	27 4	31 1	22 11	21 4	26 9
September ...	10 6	12 9	10 5	20 5	21 7	29 6	20 4	21 10	26 0
October ...	9 9	12 4	9 13	17 5	18 3	19 0	17 3	22 7	22 5
November ..	9 6	11 4	9 17	15 1	19 10	19 10	16 3	19 1	21 9
December ..	8 11	11 3	9 14	15 3	19 7	21 10	17 7	19 6	22 5
Average for year ...	8 17	9 15	9 16	20 3	19 6	24 5	19 6	19 0	21 11

It is to be noted that the quantity of wool carried on sheep affects the price of sheep considerably. As a general rule sheep at market in January and February have been shorn, during March and April they have growing fleece, from May to August they are woolly, and from September to the end of the year both shorn and woolly sheep are marketed. There is, of course, considerable variation from this generalisation owing to the fact that shearing in some part or other of the State usually extends from May to November.

Comparison of the course of prices may be made with the monthly rainfall index and the average monthly prices of wool published on previous pages.

#### SLAUGHTERING.

The slaughter of live stock for sale as food, either for local consumption or for export, is permitted only in places licensed for the purpose, in accordance with the Cattle Slaughtering Act, 1902.

The following table shows the average number of slaughtering establishments and the number of stock slaughtered in the State in quinquennial periods since 1897 and particulars for each of the last five years. The

figures relating to the establishments prior to 1921 are in excess of the actual number, as they include a large number of butchers' shops in country districts.

Period.	Slaughter-houses.	Stock Slaughtered in Establishments and on Farms and Stations.								Pigs.
	No.	Sheep.			Cattle.					
		Sheep.	Lambs.	Total.	Bullocks.	Cows.	Calves.	Total.		
Average—					Thousands.					
5 Years ended—										
December, 1901 ...	1,780	4,868	158	5,026	231	117	22	370	214	
" 1906 ...	1,587	3,760	188	3,948	201	87	20	308	238	
" 1911 ...	1,275	5,780	389	6,169	260	138	42	440	251	
June, 1916† ...	1,192	5,279	476	5,755	300	217	64	587	278	
" 1921 ...	928	3,788	337	4,125	275	136	55	466	206	
" 1926 ...	1,077	3,625	809	4,434	397	218	129	754	348	
" 1931 ...	1,078	4,272	1,364	5,636	312	240	154	712	421	
March, 1936 ...	1,132	4,581	2,300	6,890	323	218	292	833	488	
Year ended—										
March, 1932 ...	1,079	4,884	1,996	6,880	297	168	164	629	425	
" 1933 ...	1,154	5,383	2,136	7,519	314	180	209	703	453	
" 1934 ...	1,116	4,427	2,737	7,164	288	207	270	765	461	
" 1935 ...	1,186	4,437	2,373	6,810	349	251	371	971	505	
" 1936 ...	1,124	3,773	2,304	6,077	360	283	444	1,096	596	

\* Includes a small number of bulls. † The period 1912 to 1915-16 covers 4½ years; the figures are annual averages for the period.

The table shows that the slaughtering of sheep did not again attain the high pre-war level until 1932-33, when there was renewed activity in the export of mutton and lamb (principally the latter), fostered to some extent by the low price of wool. The number of cattle slaughtered has increased almost consistently over the past four decades, and rapidly in the last four years under review; partly owing to the development of a local market for veal and an increase in exports encouraged by provision of facilities for transport in chilled condition. There has also been a gradual increase in the number of pigs slaughtered. It is interesting to note the marked change in the type of sheep slaughtered. Between 1897 and 1920-21 lambs represented only about 6.2 per cent. of the sheep killed. Thereafter lamb rapidly increased in popularity, and in the last five years under review a ratio of slightly more than one lamb to two sheep slaughtered was attained.

The following summary shows the distribution of slaughtering operations in New South Wales in the year ended 31st March, 1936. For purposes of classification in this table the term "abattoirs" relates to establishments in which 100,000 or more sheep were slaughtered:—

District and Establishments.	Sheep.	Lambs.	Cattle.			Pigs.
			Bullocks.	Cows.	Calves.	
State Abattoirs ...	1,369,325	1,404,901	129,539	78,975	146,268	173,032
Other Abattoirs ...	521,702	724,672	80,329	42,945	44,609	65,094
Total Abattoirs ...	1,891,027	2,129,573	209,868	121,920	190,877	238,126
Country Slaughter-houses ...	846,334	121,120	144,940	152,984	247,768	343,310
Stations and Farms ...	996,218	53,013	14,549	7,771	5,116	14,188
Grand Total ...	3,733,579	2,303,706	369,357	282,675	443,761	595,624

Country killing for purposes of export or metropolitan consumption is of inconsiderable extent. The Newcastle District Abattoirs are included under the heading "Other Abattoirs." Under the heading "Country Slaughter-houses" are included all licensed slaughter-houses, except country abattoirs, while the slaughter for consumption on rural holdings is shown under the heading "stations and farms."

In country towns licensed slaughter-houses are inspected by a local officer appointed and controlled by the Local Government authorities. In Newcastle public abattoirs were established in 1912 under control of a board, elected by the councils of the local areas in the district.

In the metropolitan area stock is slaughtered at the State Abattoirs at Homebush Bay. Animals sold at Flemington are inspected before being killed and those found to be diseased are destroyed, while "doubtful" beasts are marked for further special attention at the abattoirs. There is a staff of inspectors at the State Abattoirs and inspectors are stationed at private slaughtering premises throughout the County of Cumberland. The operations of the inspectorial staff are supervised by the veterinary officers of the Metropolitan Meat Industry Commission, who pay regular visits to the different establishments.

Particulars of stock slaughtered at the State Abattoirs, Homebush Bay, during recent years are shown in the following statement:—

Year ended 30th June.	Cattle.	Calves.	Sheep.	Lambs.	Pigs.
1928 ... ..	225,785	111,693	1,611,191	805,596	179,531
1929 ... ..	230,153	116,757	1,381,506	690,753	176,053
1930 ... ..	190,646	118,478	1,851,434	923,623	187,988
1931 ... ..	157,117	103,252	1,808,259	904,129	184,029
1932* ... ..	175,613	89,156	2,012,245	1,006,122	168,256
1933* ... ..	182,262	88,916	2,268,750	1,134,375	163,627
1934* ... ..	162,226	91,585	1,522,225	1,613,431	167,995
1935* ... ..	197,496	126,332	1,752,247	1,427,294	155,020
1936* ... ..	129,539	146,268	1,369,325	1,404,901	173,032

\* Year ended 31st March.

Certain aspects of the local meat trade, especially the distribution and consumption of meat, are discussed in the chapter "Food and Prices" of this Year Book.

### *Prices of Meat, Sydney.*

The following table shows the average wholesale prices of meat, as furnished by the Meat Industry Commission (in pence per lb.) delivered from the Pymont depot in Sydney in each month since January, 1933:—

Month.	Beef (Ox) per lb.								Mutton and Lamb, per lb.							
	1933.		1934.		1935.		1936.		1933.		1934.		1935.		1936.	
	F.	H.	F.	H.	F.	H.	F.	H.	M.	L.	M.	L.	M.	L.	M.	L.
January ... ..	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
February ... ..	2.1	4.7	2.5	4.4	2.1	4.0	2.1	5.4	2.0	3.8	3.6	5.1	3.5	5.6	4.1	6.1
March ... ..	2.2	4.4	2.8	4.6	1.9	3.6	2.5	4.9	1.9	3.7	3.6	5.3	2.8	5.4	4.2	6.3
April ... ..	2.3	4.4	2.3	4.4	1.9	3.7	2.1	4.6	1.6	3.5	3.6	5.0	2.4	5.2	4.1	6.3
May ... ..	2.5	4.3	2.4	4.1	2.0	3.7	1.9	3.4	1.9	3.9	3.5	5.6	2.4	5.1	3.0	6.2
June ... ..	2.4	4.0	2.3	3.9	2.0	3.7	1.9	3.4	2.1	4.1	3.3	5.7	3.0	5.6	3.2	5.7
July ... ..	2.4	4.4	2.1	3.5	2.3	3.8	2.8	4.1	2.5	4.2	3.3	5.5	3.0	5.6	3.8	6.4
August ... ..	2.8	4.8	2.2	4.1	3.1	4.4	2.8	4.1	2.8	4.5	4.2	6.3	4.1	5.9	4.5	7.0
September ... ..	3.1	5.4	2.2	4.0	3.0	4.8	2.5	4.4	3.3	4.6	4.6	6.9	4.7	6.5	4.8	8.1
October ... ..	2.9	5.4	2.6	4.4	3.2	5.3	2.6	4.4	3.0	4.6	4.0	6.4	4.4	5.7	4.3	7.4
November ... ..	2.8	5.1	2.2	4.4	3.0	5.2	2.4	4.1	3.2	4.5	3.4	5.4	4.0	6.0	4.0	6.6
December ... ..	2.8	4.9	2.2	4.5	2.6	4.8	2.2	3.7	3.0	4.4	3.2	5.3	4.0	5.9	3.3	5.7
Average ... ..	2.5	5.0	2.1	4.0	2.3	4.8	2.3	4.2	3.5	5.4	3.1	5.1	3.5	5.6	3.5	6.1

F—Fores; H—Hinds.

M—Mutton; L—Lamb.

The average annual wholesale prices of meat in Sydney and of frozen Australian meat in London in pre-war years and in 1921 as compared with the period 1926-1935 are shown in the following table:—

Year.	Sydney (Pyrmont Depot).				London.	
	Beef (Ox).		Mutton.	Lamb.	Beef Hinds (Frozen).	Mutton (Frozen).
	Fores.	Hinds.				
	per lb.	per lb.	per lb.	per lb.	per lb.	per lb.
	d.	d.	d.	d.	d.	d.
1911 ... ..	1·7	2·7	2·0	2·7	3·5	3·2
1912 ... ..	2·1	3·5	2·9	3·7	3·6	3·3
1913 ... ..	2·4	3·4	3·0	3·9	4·0	4·0
1921 ... ..	2·2	5·6	4·2	6·8	6·5	7·5
1926 ... ..	2·3	5·1	4·0	6·2	4·9	4·6
1927 ... ..	2·8	5·8	3·9	6·2	5·0	4·4
1928 ... ..	2·8	5·3	4·5	6·7	5·4	5·1
1929 ... ..	4·3	6·9	4·4	6·4	4·7	5·5
1930 ... ..	4·5	7·0	3·6	5·6	5·5	4·2
1931 ... ..	2·4	5·0	2·6	4·6	3·5	3·5
1932 ... ..	2·3	4·2	2·3	3·9	3·5	3·0
1933 ... ..	2·6	4·7	2·6	4·3	3·1	3·5
1934 ... ..	2·3	4·2	3·6	5·7	3·4	4·1
1935 ... ..	2·5	4·3	3·5	5·7	3·8	3·4
1936 ... ..	2·4	4·2	4·0	6·5	4·0	4·2

## MEAT TRADE.

### *Meat Export Trade.*

The meat export trade commenced to assume importance in New South Wales toward the end of the nineteenth century, when the export of frozen and chilled meat became possible through the provision of refrigerated space in ocean steamers.

The oversea export trade has, for both frozen and canned meats, grown considerably, although its progress has been subject to vicissitudes. Especial attention is given to preparation and transport of meat for export in order to ensure a high standard in the product. Stringent regulations are issued by the Department of Commerce regarding inspection and shipment of meat exported and work is closely supervised by the Commonwealth veterinary authorities. All stock killed for export are examined in a manner somewhat similar to those for local consumption, and meat which has been in cold storage is re-examined prior to shipment. In all the large modern steamers visiting the ports of New South Wales up to date refrigerated space has been provided.

The beef export trade of this State, in common with that of Australia as a whole, has, until recently, been handicapped by being confined to beef in frozen condition, whereas South American suppliers were able to land large quantities of chilled beef (which commands considerably higher prices than frozen) in British markets. During 1932, mainly as a result

of the work of the Low Temperature Research Station at Cambridge, a method was evolved whereby chilled meat might be kept for periods sufficiently long for transport from Australia. Successful experimental shipments followed; the quantities since exported have demonstrated the commercial possibilities, and it can now be said that Australia has definitely entered the chilled beef market of the United Kingdom. A number of vessels have already been specially equipped for the carrying of chilled cargoes. During 1935-36 approximately 206,700 cwt. of chilled beef was exported to the United Kingdom from Australia, about 4,800 cwt. of which was shipped from New South Wales.

The surplus volume of stock available for slaughter for export depends mainly upon the season, as in periods of scarcity the local demand absorbs the bulk of the fat stock marketed.

The quantity of frozen, chilled and preserved meat exported to all oversea destinations in various years since 1891 is shown below. Ship's stores, amounting annually to several millions of pounds in weight, are not included in the table:—

Year.	Frozen or Chilled.				Preserved.		Value of all Meat Exported.†
	Beef.	Mutton and Lamb.	Total Weight.	Total Value.	Weight.	Value.	
	cwt.	cwt.	cwt.	£	lb.	£	£
1891	*	*	105,013	101,828	6,509,928	85,629	201,421
1896	26,529	559,507	586,036	294,596	14,365,300	187,957	562,389
1901	115,050	351,516	466,566	541,525	10,086,940	209,697	914,573
1906	32,640	455,165	487,805	579,294	3,121,933	62,307	724,048
1911	65,097	535,259	600,356	753,155	20,783,779	401,384	1,291,404
1915-16	7,000	236,099	243,099	562,262	4,087,618	159,711	771,502
1920-21	110,727	166,039	276,766	937,040	4,479,460	235,801	1,225,354
1925-26	44,172	258,444	302,616	999,243	3,786,003	126,884	1,177,712
1926-27	90,143	410,588	500,731	1,013,959	6,032,937	211,210	1,304,650
1927-28	31,464	157,775	189,239	474,933	2,621,283	93,308	631,711
1928-29	63,149	202,173	265,322	702,449	2,534,832	82,928	857,535
1929-30	46,681	308,427	355,108	894,408	2,867,259	117,637	1,051,057
1930-31	19,019	327,757	346,776	663,690	2,494,380	85,669	785,827
1931-32	116,375	665,738	782,113	1,433,036	4,004,221	105,190	1,569,240
1932-33	67,822	533,118	600,940	931,138	5,932,097	150,370	1,112,203
1933-34	44,925	612,584	657,509	1,423,483	3,574,964	99,159	1,553,897
1934-35	141,841	616,320	758,161	1,775,990	3,449,602	93,874	1,923,860
1935-36	92,557	437,071	529,628	1,395,167	3,662,878	120,615	1,572,908

\* Not available.

† Total of foregoing with addition of Bacon and Ham, Pork, and Fresh and Smoked Meat.

### *Meat Export Control.*

Under the Meat Export Control Act, 1935, an Australian Meat Board has been set up, with representatives of producers, publicly owned abattoirs and freezing works, co-operative mutton and lamb freezing works, exporters and the Commonwealth Government. There are also State meat advisory committees working in association with the Board. The Act gives the Board power to recommend quality standards and grades, and methods of treatment and handling meat for export, to regulate shipments, arrange shipping and insurance contracts, advise as to the allocation of quantities of meat in any export programme which may be fixed from time to time, advertise Australian meat overseas, foster scientific research, and is required to maintain a representative in London. To enable effective export control to be maintained, regulations which came into operation on 1st July, 1936,

require that meat be exported only under license or written Ministerial authority, whilst the Board may require returns and information to be furnished in relation to meat or the meat export industry.

A special system of uniform standards of quality and grading and of the labelling of mutton and lamb has been introduced and it is understood that a somewhat similar system is to be adopted in regard to beef. A Meat Export Fund has been constituted to provide for the administrative and executive expenses of the Board and for expenditure on research. All levies under the Meat Export Charges Act, 1935, are paid to the fund. The maximum charges payable under the Act on all meat exported (unless specially exempted) are :—For beef—hindquarters, forequarters and crops,  $\frac{1}{2}$ d. each; piece beef, per 165 lb.,  $\frac{1}{2}$ d.; boneless beef, per 110 lb.,  $\frac{1}{2}$ d.; Veal—carcasses,  $\frac{1}{2}$ d. each; piece veal, per 70 lb.,  $\frac{1}{2}$ d.; boneless veal, per 50 lb.,  $\frac{1}{2}$ d. On mutton and lamb the charge is 1d. per carcass or for each 45 lb. weight of part carcasses. Pork carries a charge of 1d. per carcass and for each 100 lb. of portions of carcasses. Though provision was made for a charge of 1d. for each 100 lb. of canned meat, it has been decided to exempt such meat from the levy. All meat exported to the Pacific Islands and as ship's stores is also exempted from export charges. Charges collected to 30th June, 1936, amounted to £6,296 of which £2,301 was paid in New South Wales. At that date the unexpended funds of the Board amounted to £4,883. The Board, at its first annual meeting, approved of a capital grant of £1,000 and the payment of £500 annually for five years to the Council for Scientific and Industrial Research to assist its research activities in matters particularly related to meat export activities.

In co-operation with other marketing organisations the Meat Board secured an agreement with the Australian Oversea Transport Association relating to ocean freight rates. The freight rate on chilled beef was reduced under the agreement by one-sixteenth of a penny per lb. as from 1st July, 1937, and on other meats the existing rates are to remain unaltered for three years as from that date.

The London office of the Board has been established.

Prior to the depression meat exporting countries found considerable markets on the Continent of Europe, but the widespread pursuit of policies of economic nationalism has since resulted in the virtual cessation of the importation of meat into these countries. As late as 1929-30 only 50 per cent. of Australia's total beef exports went to the United Kingdom, but by 1934-35 the proportion shipped to British ports had risen to 88 per cent. The trade in mutton and lamb, otherwise than with the United Kingdom has always in the past been unimportant. In these circumstances the welfare of the meat industry in Australia is, in a large measure, conditioned by the place the meat exports of this country can find in the British market.

### *Exports of Meat to Great Britain.*

Since 1933 the British Government has taken action designed to safeguard the home livestock industry and to raise prices of meat primarily in the interest of British farmers. Supplies of meat to the British market were given special consideration when the Ottawa Agreements were negotiated, and the principle of quantitative restriction of exports (conserving an expanding share to the Empire countries) was accepted, Dominion suppliers recognising that a restoration of meat prices to a remunerative level was of the utmost importance. Australia undertook that exports of frozen mutton and lamb from the Commonwealth in 1933 would not exceed the quantity imported into Great Britain during 1931-32, and to endeavour that exports

of frozen beef would not exceed the quantity exported in 1931-32 by more than 10 per cent., whilst the British Government agreed that no restriction upon the importation of meat from Australia would apply until after June, 1934. Supplies of foreign frozen mutton, lamb and beef were reduced by progressive quarterly steps to 65 per cent. of the 1931-32 quantities, and importation of foreign chilled beef was not permitted to exceed the 1931-32 level, and in fact was restricted to a figure ranging about 10 per cent. below that level.

The effect of these arrangements is apparent in the improvement of mutton prices shown on page 627. But a material increase in the price of beef was not achieved, partly because supplies from Australia were not fully regulated as intended, and, to some extent, owing to the tendency for the British consumer to use mutton and lamb in place of beef.

After June, 1934, the right of the British Government to regulate supplies from Australia became effective and the control of imports by a system of quotas, determined in the light of anticipated supplies to the British market, was applied as from 1st January, 1935, fixing permissible arrivals in the United Kingdom in the respective quota periods.

The determination of quotas is the subject of constant negotiation between the British and Australian authorities, but up to a late date in 1937 beef import quotas for that year had not been fixed. Conforming to the best interests of Australian producers, it was arranged that beginning with 1936-37 the quota for mutton and lamb would in future be fixed for the yearly period, 1st October to 30th September, thereby avoiding an unduly large carry-over from one year to another in the event of a late season such as occurred in 1936. The quota of 1,900,000 cwt. of mutton and lamb fixed for the year ended September, 1937, was expected to fully meet exporters' requirements for that year.

The quotas fixed for various periods and the quantities of beef, mutton and lamb imported from the Commonwealth are indicated in the subjoined table.

*Exports of Australian Meat to the United Kingdom in vessels scheduled to Arrive at that Destination during the Under-mentioned Periods.*

Quarter.	Quota.			Actual Quantities.		
	Beef and Veal.*		Mutton and Lamb.	Beef and Veal.*		Mutton and Lamb.
	Frozen and Chilled.	Of which Chilled.		Frozen and Chilled.	Of which Chilled.	
			Thousands of cwts.			
1935—1st .....	187	30	450	205	29	447
2nd .....	331	56	450	329	55	451
3rd } .....	1,150	160	450	1,089	147	275
4th } .....			600			596
1936—1st & 2nd...	578	150	1,800	577	100	1,523
3rd .....	828	180		774	113	
4th .....	450	83		452	83	
1937—1st & 2nd...	No quota.	No. quota.	No quota.	781	172	1,015

\* Figures for 1936 and 1937 include beef and veal offal.

With the object of reaching agreement for a long-term policy, protracted discussions between the Australian, British and other interested Governments took place in London early in 1935, without finality being reached.

The British Government evinced a desire to regulate supplies by imposing a levy on all imported meat (with preference to the Dominions), the proceeds of which would be used to assist British producers who were then being subsidised from public funds. To these proposals no agreement was secured, but in July, 1936, after further consultation between representatives of the respective Governments, the principles of a long-term arrangement were announced. The policy adopted provides for a duty on foreign meat, proceeds of which will be used to subsidise British livestock raisers; continued duty-free entry of meat from the Dominions; gradual reduction of foreign imports to a determined degree, and a corresponding increase in the import quotas of the Dominions.

The oversea trade in frozen meat has undergone an appreciable change in the past twenty years, frozen lamb having largely replaced frozen mutton. In the year 1911 the oversea export from New South Wales comprised 1,149,241 carcasses of frozen mutton and 292,258 carcasses of frozen lamb. In 1935-36 the corresponding numbers were, respectively, 243,601 and 1,296,659.

The following comparison of the imports of meat into the United Kingdom illustrates the success of the Australian producer in securing a greater share of the British market. Imports of mutton and lamb from this country increased in proportion from 11.7 per cent. in the quinquennium ended 1930 to 21.8 per cent. of total imports in the five years ended 1935, reached 26.6 per cent. in 1935, but declined to 23.8 per cent. in 1936. In similar comparisons the ratios of Australian to total imports of beef were 7.3 per cent., 10.8 per cent., 12.2 per cent. and 14.9 per cent.

Year.	Beef (000 omitted) Frozen and Chilled.				Mutton and Lamb (000 omitted).			
	South American.	Australian.	Other Countries.	Total.	South American.	New Zealand.	Australian.	Total.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1926	571	57	35	663	92	134	38	267
1927	617	32	22	671	106	137	31	276
1928	532	51	26	609	113	140	27	281
1929	518	46	19	583	96	137	30	282
1930	506	40	33	579	94	165	41	319
1931	509	57	33	599	92	173	77	355
1932	482	48	38	568	77	196	58	348
1933	447	58	49	554	79	187	65	333
1934	436	79	68	583	63	178	81	324
1935	435	70	68	573	62	182	89	335
1936	446	87	50	583	45	177	75	315

\* Including other countries.

#### *Prices of Meat, London.*

The movement of the London prices for Australian frozen meat during the last four years in comparison with 1913 and 1928 is shown below. The monthly quotations represent the averages of weekly top prices and the annual averages are the means of the monthly averages. Beef prices touched the lowest point of the depression in mid-1933, and for frozen mutton values

were at their lowest (2½d. per lb.) in the months July to October, 1932. For the year 1932 the average price was but 3d. per lb. All prices are in sterling.

Month.	Frozen Beef (Hinds) per lb.						Frozen Mutton per lb.					
	1913.	1928.	1933.	1934.	1935.	1936.	1913.	1928.	1933.	1934.	1935.	1936.
January ...	d. 3½	d. 5	d. 3½	d. 3½	d. 3½	d. 3½	d. 4½	d. 5½	d. 3½	d. 4½	d. 4½	d. 3½
February ...	3½	4½	3½	3½	3½	3½	4	5½	3½	4½	4	4
March ...	3½	5	3½	3½	3½	4½	3½	5½	3½	4½	3½	4½
April ...	3½	4½	3½	3½	3½	4½	4	*	3½	4½	3	4½
May ...	3½	5½	2½	3½	3½	4½	3½	*	3½	4	3	4½
June ...	3½	6	2½	3½	3½	4	4	*	3½	4½	3	4½
July ...	4	6½	2½	3½	3½	3½	4	*	3½	4½	2½	4½
August ...	4	6	2½	3½	3½	3½	4	*	3½	4½	2½	4
September ...	4	5½	3½	3½	3½	3½	4	*	3½	4	3½	4½
October ...	4½	5	3½	3½	3½	3½	4	5½	3½	3½	3½	4½
November ...	4½	5	3½	3½	3½	3½	4	4½	3½	3½	3½	4½
December ...	4½	4½	3½	3½	3½	4	4½	4½	4½	3½	3½	4½
Annual Average	4	5½	3½	3½	3½	4	4	5½	3½	4½	3½	4½

\* No quotation.

Australian chilled beef was first quoted on the Smithfield market on June 29th, 1935. Latterly there has been a margin for Argentine ox hinds over Australian ranging from about ½d. to 1d. per lb. The margin doubtless reflects a difference in quality toward the reduction of which Australian producers are giving attention to the breeding of cattle of types suited to the British market, and at the same time, seeking to secure the utmost efficiency in the handling, grading and transport of Australian beef.

Considerable benefit has already accrued to producers as a result of the transport of beef in chilled condition. Average prices paid in London (in English currency) for Australian frozen and chilled beef are indicated below:—

Year and Type.				Prices in London for Australian Beef (Per lb.*Sterling).												
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Av. for Year.
1935	...	...	C.C.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
			C.H.	...	...	...	...	...	...	1 <sup>7</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	...	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	...
			F.H.	...	...	...	...	...	...	3 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>4</sub>	5	...	4 <sup>5</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>8</sub>	...
1936	...	...	C.C.	2 <sup>5</sup> / <sub>8</sub>	...	2 <sup>5</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>5</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>5</sup> / <sub>8</sub>	3	2 <sup>3</sup> / <sub>4</sub>	
			C.H.	4 <sup>1</sup> / <sub>2</sub>	...	3 <sup>3</sup> / <sub>4</sub>	4	3 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	5	4 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	5	4 <sup>5</sup> / <sub>8</sub>	
			F.H.	3 <sup>5</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	4	3 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	3 <sup>7</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>	4	4
1937	...	...	C.C.	3	3 <sup>1</sup> / <sub>4</sub>	3 <sup>5</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>5</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	...	...	...	
			C.H.	4 <sup>3</sup> / <sub>4</sub>	5	4 <sup>1</sup> / <sub>4</sub>	4 <sup>5</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	4 <sup>7</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	...	...	...	
			F.H.	4	4 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	...	...	4 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	...	...	...

C.C., Chilled Crops.

C.H., Chilled Hinds.

F.H., Frozen Hinds.

The average wholesale prices per pound obtained in each of the past ten years for Scottish and frozen mutton sold in London were:—

Year.	Best Scottish.	New Zealand.	Aus- tralian.	Argen- tine.	Year.	Best Scottish.	New Zealand.	Aus- tralian.	Argen- tine.
	d.	d.	d.	d.		d.	d.	d.	d.
1926	11½	6½	4½	5½	1932	*	3½	3	3½
1927	11¼	6½	4½	5½	1933	*	4	3½	3½
1928	12½	7½	5½	6½	1934	10½	5	4½	4½
1929	12¼	6½	4½	5½	1935	10	4½	3½	4
1930	12½	5½	4½	4½	1936	9½	4½	4½	4½
1931	10½	4½	3½	4					

\* Not available.

### Meat Works.

Apart from slaughtering, important subsidiary industries in the handling of meat have arisen in the form of refrigerating and meat-preserving works, some further information regarding which is given in the chapter "Factories" of this Year Book. The extent of these activities, however, is subject to marked seasonal fluctuations. Particulars of the numbers of sheep and cattle handled in the various works, and of the output during the past ten years are shown below:—

Year.	Carcasses etc. Treated.				Output of Meat Preserving Works.		
	Refrigerating Works.		Meat Preserving.		Tinned Meat.		By-Pro- ducts, etc.
	Cattle.	Sheep.	Sheep.	Meat and Sundries.	Weight.	Value.	Value.
	No.	No.	No.	lb. (000).	lb. (000)	£	£
1926-27	30,247	1,225,182	60,507	18,496	6,673	217,238	138,653
1927-28	30,202	641,082	1,642	9,182	3,920	167,815	42,019
1928-29	51,410	718,571	55	10,681	4,251	172,627	70,524
1929-30	48,421	1,132,552	1,416	10,979	4,185	162,408	70,238
1930-31	30,261	1,327,692	3,232	10,472	4,158	149,387	31,459
1931-32	42,227	2,127,615	1,046	13,985	5,814	169,581	78,522
1932-33	60,627	1,818,696	13,083	19,881	7,522	187,494	86,555
1933-34	46,206	2,053,430	2,829	11,515	4,910	148,030	53,522
1934-35	97,337	2,210,908	1,790	13,807	5,479	162,596	28,808
1935-36	71,447	1,617,502	762	9,040	4,338	141,635	41,025

Included in the meat and sundries treated in meat preserving works in 1935-36 were 7,019,702 lb. of beef, 601,446 lb. of mutton, and 1,418,652 lb. of sheep and ox tongues.

## OTHER PASTORAL PRODUCTS AND BY-PRODUCTS.

The minor products accruing from pastoral occupations include skins and hides, tallow, lard and fat, furs, hoofs, horns, bones, bone-dust, glue pieces, and hair. Some of these are discussed in the chapter relating to factories, and the following table contains particulars of the overseas exports of these products at intervals since 1901:—

Products.	Overseas Exports.					
	1901.	1911.	1920-21.	1930-31.	1934-35.	1935-36.
<b>Skins and Hides—</b>						
Cattle ... .. No.	91,084	263,306	219,070	520,917	610,897	791,313
Horse ... .. No.	472	1,392	140	3,618	...	200
Rabbit and Hare ... lb.	*	5,795,839	3,387,480	4,679,429	6,202,286	6,177,386
Sheep ... .. No.	*	2,410,543	1,399,388	3,302,037	2,287,057	3,019,448
Other ... .. £	184,522	296,672	690,662	179,819	150,285	196,047
Bonedust ... .. cwt.	66,473	116,733	59,670	6	41	166
Bones ... .. cwt.	3,207	6,807	11,152	5,646	5,733	5,688
Furs (not on the skin) ... £	767	117	...	...	...	...
Glue-pieces and Sinews ... cwt.	12,862	20,580	46,735	3,106	228	96
Glycerine and Lanoline ... lb.	*	138,347	1,135	96,028	320,242	128,483
Hair (other than human) ... lb.	165,562	255,819	92,165	86,206	108,209	64,609
Hoofs ... .. cwt.	2,215	3,733	3,159	2,885	3,798	4,376
Horns ... .. £	12,532	13,475	14,548	4,325	4,541	6,166
Lard and Refined Animal Fats lb.	13,633	227,000	2,191,819	180,991	459,088	383,861
Leather ... .. £	374,541	334,966	524,078	258,178	267,562	314,991
Sausage-casings ... .. £	2,567	52,562	99,653	128,861	90,713	76,331
Tallow (unrefined) ... cwt.	305,227	612,911	233,891	227,993	319,522	169,381
Total Value of above-mentioned minor Pastoral Products exported ... .. £	1,223,728	2,486,492	3,385,838	2,149,714	2,224,608	3,187,298

\* Not available.

Skins and hides are the most important of the items included in the table, and the number and value of these vary in accordance with slaughtering operations, and in the case of rabbit skins, etc., as a result of prices obtainable.

## VALUE OF PASTORAL PRODUCTS EXPORTED.

The total value of goods exported overseas, which may be classed as pastoral products or by-products (apart from dairy and farmyard products), is very large. Particulars of the value, as declared upon export, of such products exported overseas from New South Wales during the five years ended June, 1925, and in certain recent years, are shown in the following table:—

Commodity.	Average, 1920-25.	1931-32.	1932-33.	1933-34.	1935-36.
	£	£	£	£	£
Wool ... ..	20,851,506	13,896,532	24,255,820	16,719,987	22,108,087
Meat ... ..	1,200,785	1,569,240	1,553,897	1,923,860	1,572,908
Live stock ... ..	60,903	54,609	44,506	72,131	47,876
Other* ... ..	4,163,053	1,676,092	2,246,050	2,224,608	3,187,298
<b>Total ... ..</b>	<b>26,276,247</b>	<b>17,196,473</b>	<b>28,100,273</b>	<b>20,940,586</b>	<b>26,916,169</b>
<b>Proportion of total exports overseas†</b>	<b>per cent. 54·7</b>	<b>per cent. 55·8</b>	<b>per cent. 71·4</b>	<b>per cent. 60·1</b>	<b>per cent. 52·1</b>

\* Items listed in previous table.

† Excluding bullion and specie.

The above figures are not comparable with those relating to the value of production which follow, since they contain items which have been enhanced in value by manufacture and other processes. In addition, they are not

valued as at the place of production, but on the basis of f.o.b. Sydney, and they do not relate to goods produced during the year as do the estimates of the value of production.

#### VALUE OF PASTORAL PRODUCTION.

It is difficult, from the nature of the industry, to estimate the return from pastoral pursuits as at the place of production; but, taking the Sydney prices as a standard, and making due allowance for incidental charges, such as railway carriage or freight and commission, the farm values of pastoral production from the different kinds of stock during various years since 1901 are shown in the following table:—

Year.	Estimated Annual Farm Value of Pastoral Production (000 omitted).							
	Wool.	Sheep.		Cattle.		Horses.	Total.	Per head of Population.
		Slaught- ered.	Exported.	Slaught- ered.	Exported.			
	£	£	£	£	£	£	£	£ s. d.
1901	8,425	2,071	...	1,229	...	722	12,447	9 2 1
1906	13,792	3,514	...	1,520	...	885	19,711	13 5 6
1911	14,085	2,811	...	1,689	...	2,001	20,586	12 7 3
1915-16	13,298	4,295	...	3,729	...	2,172	23,494	12 8 1
1920-21	13,023	2,313	...	2,973	...	2,027	20,336	9 14 7
1926-27	33,234	2,591	2,159	4,934	(—) 239	232	42,911	18 1 4
1927-28	33,874	2,640	1,941	4,888	(—) 1,980	231	41,594	17 1 10
1928-29	30,879	2,801	1,576	5,814	(—) 583	192	40,679	16 7 6
1929-30	18,099	2,732	1,243	4,508	(—) 334	107	26,355	10 8 3
1930-31	13,705	1,795	364	2,767	(—) 899	103	17,835	7 0 2
1931-32	15,233	1,543	373	2,632	(—) 565	115	19,331	7 10 7
1932-33	16,659	1,113	911	2,615	(—) 69	144	21,373	8 5 0
1933-34	29,951	2,268	733	2,585	(—) 1,020	145	34,662	13 5 3
1934-35	18,045	3,352	421	2,896	(—) 1,001	218	23,931	9 1 8
1935-36	25,408	3,152	1,229	3,780	(—) 78	150	33,641	12 13 3

(—) Denotes excess of imports.

In accordance with a decision of the Conference of Statisticians, values for 1925-26 and subsequent years were revised by excluding valuations of natural increase of sheep and cattle which had been included in those years and not in previous years. At the same time, the value of skin wools was deducted from the value of sheep slaughtered in order to eliminate duplication. In view of the diminution of horse-breeding the method of calculating the value of the cast was revised in 1925-26, and this led to a substantial reduction in the totals. It is estimated that the value of the principal materials used in the pastoral industry was £842,000 in 1935-36, and the depreciation on machinery, £189,000.

#### NOXIOUS ANIMALS.

The only large carnivorous animals dangerous to stock in Australia are the indigenous dingo, or so-called native dog, and the fox, which has been introduced from abroad; but graminivorous animals, such as kangaroos, wallabies, hares, and rabbits, particularly the last-named which are of foreign origin, are deemed by the settlers even more noxious. In the latter part of 1920, however, native dogs became an increasing menace to flocks in the Western Division, and added considerably to the difficulties experienced by graziers in that region. In 1921 a Wild Dog Destruction Act was passed, placing the matter in the control of the Western Land Board. This board was charged with the maintenance of the border fence between Queensland

and New South Wales and with the prosecution of measures calculated to destroy the dingo pest. It has also completely taken over the control of 157 miles of dog-proof fencing formerly administered by the South Australian Government. During the year ended 31st December, 1936, receipts under this Act were £7,025, including £5,269 collected as rates, and £6,014 was expended; for 1935 the corresponding figures were £9,257, £7,234 and £9,092 respectively. The pest has been so far checked that it has been possible to re-stock with sheep holdings which for some time had been used for cattle only. The rate imposed under the Act was reduced from  $\frac{1}{20}$  d. per acre to  $\frac{1}{80}$  d. per acre in 1932, and the surplus funds accumulated at the higher rate are being expended to supplement the annual receipts. The credit balance on 31st December, 1936, was £15,399.

### Rabbits.

A brief account of the measures taken to combat the pest was published on page 794 of the Year Book for 1921, and further reference to rabbits was published on page 643 of the Year Book for 1928-29. It is claimed that a virus, infection with which is fatal to rabbits, but without effect upon other animals, has been discovered, and controlled experiments with this means of rabbit extermination are being undertaken.

It is estimated that up to 30th June, 1934, pastures protection boards erected 1,127 miles and private owners 146,453 miles of rabbit-proof fencing the respective costs being £67,975 and £9,867,379, but these figures are known to be incomplete and their publication is being discontinued.

The following table shows the quantity and value of frozen rabbits and hares, and of rabbit and hare skins exported from New South Wales to countries outside Australia:—

Year.	Exports Oversea.				
	Frozen Rabbits and Hares.		Rabbit and Hare-Skins.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	pairs.	£	lb.	£	£
1901	*	6,158	*	9,379	15,537
1906	5,938,518	246,803	7,380,455	293,260	540,063
1911	6,806,246	330,741	5,795,839	295,476	626,217
1915-16	9,487,687	607,711	4,352,640	210,935	818,646
1920-21	2,830,315	301,015	3,387,480	609,570	911,185
1925-26	3,510,311	340,171	11,004,446	2,231,637	2,571,808
1926-27	2,881,701	257,641	11,860,570	2,437,010	2,694,651
1927-28	2,884,026	262,759	9,316,863	1,886,523	2,149,282
1928-29	1,956,508	193,525	8,225,868	1,950,027	2,143,552
1929-30	2,371,506	214,203	5,817,993	1,042,068	1,256,271
1930-31	3,526,033	252,074	4,679,429	415,245	667,319
1931-32	5,064,189	313,029	5,177,364	345,152	658,181
1932-33	6,486,025	323,398	5,447,487	313,111	636,509
1933-34	3,067,935	203,342	7,176,707	672,462	875,804
1934-35	2,769,216	145,144	6,201,754	631,001	776,145
1935-36	1,442,087	83,998	6,177,386	1,157,753	1,241,751

\* Not available.

It is apparent that the rabbit industry has assumed an important place in the oversea trade of the State, although its volume is subject to pronounced seasonal and market fluctuations.

*Wire-netting Advances.*

Under the Pastures Protection Act, 1934, the provisions of the Act thereby repealed which enabled advances to be made to settlers for the purchase of wire netting (outlined in previous issues of this Year Book) were retained, but the Pastures Protection Boards, which formerly were liable for making advances and for their repayment, act merely as collecting agents for the Minister for Lands, to whom the land-owner is now directly responsible. From funds provided by Parliament, the Minister may purchase and sell to owners of private land, netting or other materials used in the construction of rabbit-proof, dog-proof or marsupial-proof fences, or machinery, plant or substances for the destruction of noxious animals, payment therefor, with interest, being made by annual instalments extending over such period as the Minister may determine.

Netting, etc., must be used for the purpose indicated, erected within a specified period, and maintained in repair until the debt is extinguished. The purchase money and interest becomes a charge upon the holding of the owner and has priority over all mortgages or charges other than debts due to the Crown.

Netting, etc., may also be sold for cash to the occupier of any holding upon security being given that the material will be used on the holding and within the time specified by the Minister.

Figures as to operations during the year 1934-35 with those for 1935-36 shown in brackets were as follow:—The quantities of material supplied to landholders were 1,333 (717) miles of wire netting, 189 (110) tons of fencing wire, and 95 (49) tons barbed wire in addition to sundry materials, the total value being £54,002 (£30,846). Repayments during the year amounted to £63,098 (£62,063). A sum of £565,000 has been voted by Parliament since 1905 for the purpose of making wire-netting advances. By utilising this sum and re-advancing moneys repaid, the Department of Lands has made advances amounting to £1,340,700 at 30th June, 1935, and £1,371,546 at 30th June, 1936.

The amount outstanding in respect of advances made by the State was £504,918 at 30th June, 1935, and £494,627 at 30th June, 1936.

In terms of the Advances to Settlers Act, 1923, a trust fund was established by the Commonwealth, from which advances for the purchase of wire-netting may be made to the States. The wire-netting is then supplied to the settlers at such price and upon such terms as are prescribed by regulation. The total advances to New South Wales under this Act to 30th June, 1937, amounted to £54,318, and the repayments amounted to £27,815.

## PASTURES PROTECTION BOARDS.

The Pastures Protection Act, 1934, which came into operation on 29th March, 1935, completely revised the law in relation to pastures protection.

For the purpose of administering the Pastures Protection Act which relates to destruction of rabbits and noxious animals, travelling stock, sheep brands and marks, and certain other matters, the State is divided into 63 Pastures Protection Districts, for each of which there is constituted a board of eight directors, elected every three years by ratepayers from among their own number. There are also stock inspectors and rabbit inspectors, who are paid from the funds of the Pastures Protection Boards to which they are attached.

Rates to provide funds for the purposes of the boards are levied upon owners of ten or more head of large stock, or 100 or more sheep, at a rate not exceeding fourpence per head of large stock and two-thirds of a penny per head of sheep, but a rebate of one-half may be made to occupiers of holdings enclosed with wire-netting fences which in the opinion of the board are rabbit proof, and provided the holdings have been kept reasonably free from rabbits during the calendar year immediately preceding that for which the rate is made. The funds so raised may be applied by the boards to defraying expenses incurred in administering the Act, and for any other purpose approved by the Minister. The boards are required each year to pay 3 per cent. of their revenue to the Colonial Treasurer to cover the cost of administering the Act.

Since 1918 the boards have levied rates on travelling stock in the Eastern and Central Divisions to constitute a fund for the improvement of travelling stock and camping reserves under the boards' control.

The boards are empowered also to erect rabbit-proof fences as "barrier" fences wherever they deem necessary, to pay a bonus for the scalps of noxious animals, and to enforce the provisions for the compulsory destruction of rabbits.

#### REGISTRATION OF BRANDS.

The Registration of Stock Brands Act, which came into force on 13th December, 1921, cancelled the registration of all existing brands and provided for re-registration of those which owners desired to retain, upon application being made within a prescribed period. The Act was amended in 1923. Of approximately 143,000 registered large stock brands in existence at the time of passing the principal Act, 43,229 were re-registered, and at 30th June, 1937, excluding transfers and cancellations, etc., the number of individual brands was approximately 71,000. Brands for large stock may be used on either cattle or horses. A registered brand may not be used by any person other than the proprietor.

Sheep brands, of which the registrations are approximately 41,000, are issued for Pastures Protection Districts and may not be duplicated in any one district; the same brand may, however, be issued in several Pastures Protection Districts.

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#### ANIMAL HEALTH.

Although, as in all stock-raising countries, diseases of various kinds exist amongst the stock of the State, yet, in common with the rest of Australia, it is free from many of the more serious epizootic and parasitic diseases which cause heavy loss in other pastoral countries. It is, for instance, free from rinderpest, foot and mouth disease, rabies, glanders, swine fever, sheep scab, and trypanosomiasis. Since the passage of the Stock Diseases Act, in 1923, considerable advance has been made in the control of disease generally. Under this Act certain diseases are made notifiable, and necessary powers are provided for the inspection of stock and for the detention, seizure, treatment, quarantine and destruction of diseased stock.

The whole of the work connected with the inspection of stock for disease has been concentrated under the Department of Agriculture, which maintains a staff of veterinary officers and inspectors of stock stationed at strategic points throughout the country, with headquarters at Sydney. Control has been decentralised by the appointment of District

Veterinary Officers, each with a group of inspectors under his supervision. This arrangement has enabled such diseases as anthrax and pleuropneumonia to be dealt with more expeditiously and the work of each group of inspectors to be co-ordinated by their senior officers. Careful attention is given by this staff to the inspection of cattle on dairies, particularly those supplying milk for human consumption.

Within recent years a scheme for the creation of accredited tubercle-free herds has been put in operation, and this has lately been extended to cover certain areas, chiefly municipalities, in various parts of the State.

Research work has been developed during the last few years. A well-equipped station is established at Glenfield under the immediate control of the Director of Veterinary Research, with a staff of veterinary officers and laboratory assistants carrying out both diagnostic and research work. The operations at this station are closely co-ordinated with those of the field staff. Movements of livestock interstate are controlled, and a staff of Inspectors is maintained where required along the borders. This work is of particular importance in connection with the Queensland border owing to the presence of cattle tick in that State. Power is provided to enable the enforcement of dipping before cattle or horses are allowed to enter New South Wales.

The Council for Scientific and Industrial Research has control of the McMaster Animal Health Laboratory, located in the grounds of the University of Sydney and erected in 1930-31 as a result of a gift of £20,000 by Sir Frederick McMaster. Extensive scientific investigation of matters affecting animal health are undertaken at the laboratory, co-ordinated with similar activities in other States, and in close co-operation with the Department of Veterinary Science of the University of Sydney. The Council has also acquired an area of 800 acres at St. Marys to be used mainly as a field station in connection with the laboratory and for genetic work on sheep.

#### *Cattle Tick Eradication.*

The most difficult problem confronting the veterinary authorities is the question of cattle tick eradication. The cattle tick first gained access to New South Wales in the early years of the century and continuous struggle has been maintained to prevent its introduction into clean parts of the State. Although the spread of the tick could not be entirely prevented, restrictive efforts have been successful in confining the infestation to a relatively small part of the State, and in preventing the introduction of tick fever. In 1932, however, owing to movements of cattle from one property, a large additional area had to be quarantined, as three small infestations were discovered. For the first time in the history of tick infestation in Australia a complete eradication policy was carried out in a definite section of the tick quarantine areas. The treatment necessitated by such a policy terminated in June, 1933, and, after a period of close inspection to determine its effectiveness, the area was duly released at the end of June, 1934. Subsequent activities have enabled the lifting of the quarantine in further areas. This work, however, is costly, involving an expenditure of as much as £150,000 per annum. Under an arrangement between the Commonwealth Government and the States of New South Wales and Queensland, the Commonwealth authorities have agreed to contribute a share of the cost, the amounts for the successive years 1933-34 to 1935-36 being £44,450, £45,100 and £54,450. The creation of the Cattle Tick Control Commission in 1926 has brought about increased co-ordination

between the authorities of the States concerned. The methods of control and eradication are based on similar lines to those which have been successful in the United States of America, and include control of stock movements and the regular dipping of stock within areas selected for eradication. Dips are provided by the Government, and private dips constructed in accordance with the plans and specifications of the Department are subsidised.

*Swine Compensation Act, 1928.*

Following an outbreak of swine fever which occurred in 1928, the Swine Compensation Act was passed to provide for the payment of compensation for pigs condemned on account of the presence of certain diseases and for carcases condemned in slaughter-houses as unfit for human consumption because of the presence of disease. The funds required for payment of compensation are collected by the sale of swine duty stamps, which are affixed to a register kept at each slaughtering establishment to indicate the number of pigs slaughtered. In this way information is obtained as to the herds likely to be affected with tuberculosis, and the legislation has done much to create confidence in the pig-raising industry.

*Veterinary Surgeons Act.*

The Veterinary Surgeons Act came into operation on 5th December, 1923, to provide for the registration of veterinary surgeons, and to regulate the practice of veterinary science. A Board of Veterinary Surgeons has been established to administer the Act, which specifies the qualifications for registration and prohibits practice by unregistered persons.

As at 30th June, 1937, there were registered 233 veterinary surgeons.

## DAIRYING, POULTRY, Etc.

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THE natural conditions in parts of New South Wales are highly favourable to the development of the dairying industry. The soil and climate in the coastal portions of the State are suitable for the maintenance of the dairy herds with a minimum of expense and labour, as the rainfall is abundant and the animals do not require housing nor hand-feeding during a long winter, as in cold countries. Natural pasture is generally available throughout the year, and hand-feeding is necessary only in very dry seasons.

Dairying operations in New South Wales are said to have begun during the twenties of last century in the immediate vicinity of Sydney and in the Illawarra districts to supply the population of the metropolis. The development of dairying as a national industry, however, was slow until the introduction of refrigeration enabled producers to overcome disabilities in manufacturing and distributing perishable dairy products in a warm climate and to export the surplus oversea. Pasteurisation and the application of machinery to the treatment of milk and the manufacture of butter, the development of the factory system, and improvements in regard to ocean transport have enabled production to expand; butter has become an important item of the export trade.

In the drier inland divisions, sheep and wheat farming are the main rural industries, and the area devoted to dairying is not extensive, but has tended to increase in recent years. In these districts dairy-farming is undertaken mainly to supply local wants, and a number of well-equipped factories have been established in proximity to inland towns. Dairying is conducted also on the Murrumbidgee and Hay irrigation areas.

In the coastal division 13,665 holdings were used exclusively for dairying in 1935-36 and 3,872 for dairying combined with other purposes. In the other parts of the State, where fodder must be grown for winter feeding the industry is conducted usually in conjunction with agriculture and grazing—there being only 1,304 holdings used solely for dairying and 3,518 for dairying in combination with other rural pursuits. The extent to which dairying was conducted with wheat farming in 1932-33 and 1935-36 is shown at pages 545 and 546 of this volume.

The total area devoted to dairying in the year 1930-31, the last year for which the particulars are available, was approximately 5,483,000 acres, of which 4,783,000 acres were in the coastal division; of this latter area 2,214,000 acres were in the North Coast and 1,677,000 acres in the Hunter and Manning divisions.

Most of the native grasses of the State are particularly suitable for dairy cattle, as they possess milk-producing as well as fattening qualities. In the winter the natural herbage is supplemented by fodder crops, such as maize, barley, oats, rye, lucerne, and the brown variety of sorghum, or the planter's friend. Ensilage also is made for fodder, but the quantity made in each year is not large, although tending to increase. The progress made in fodder conservation of this type is indicated at page 571 of this volume. The area of land devoted to sown grasses in March, 1936, amounted to 2,722,459 acres, of which 2,276,606 acres were in the coastal district. The produce of this land is used mainly as food for dairy cattle. The practice of manuring pastures has been adopted in dairying districts during recent years, and an extension in this direction is anticipated. Particulars relating to the use of manures on pastures appear at page 596 of this issue.

*Supervision of Dairying and Dairy Products.*

Legislation relating to dairying and dairy products has been enacted by the State and the Commonwealth to provide for the supervision of production and distribution and for organised marketing.

The State Acts are the Dairies Supervision Act, 1901-1930; the Dairy Industry Act, 1915-1932; and the Dairy Products Act, 1933. The Federal Acts are concerned mainly with the export trade, viz., the Commerce (Trade Descriptions) Act, 1905-1933; the Dairy Produce Export Control Act, 1924; and the Dairy Produce Export Charges Act, 1924-1929. Legislation relating to the milk supply of Sydney and Newcastle, which is supervised by the Milk Board, is described in the chapter "Food and Prices." The report of the Investigator (Mr. E. H. Swift, M.A.) under the Milk (Investigation) Act, 1936, was submitted to the Governor on 29th January, 1937, and has been published.

The Dairies Supervision Act, 1901-1930, consolidated laws designed to prevent the spread of disease through unhygienic conditions in the handling of milk and milk products. Under this law all dairymen and milk vendors are required to register their premises with local authorities and the premises are subject to inspection. It is illegal for any person to sell milk or milk products produced on unregistered premises. Reference to the beneficial effects of this law in relation to public health is made in the chapter "Vital Statistics" of this Year Book.

The Dairy Industry Act prescribes that dairy factories and stores must be registered. Cream supplied to a dairy factory must be tested and graded at the factory, and the farmer is paid on the basis of the butter-fat content, or on the amount of commercial butter obtained from his cream. Butter must be graded on a uniform basis and packed in boxes bearing registered brands indicating the quality of the product and the factory where it was produced. The testing and grading at the factory may be done only by persons holding certificates of qualification.

The State has been divided into ten dairying districts, and in each an experienced dairy instructor is appointed to supervise the dairy factories and to administer the Dairy Industry Act and regulations thereunder. He acts as inspector, instructs the factory managers and cream-graders in matters connected with the industry, and advises the dairy-farmers, especially those supplying cream of inferior quality. He also exercises supervision over the quality of butter produced, and may order structural improvements in factory premises. Usually the number of factories under the supervision of each instructor does not exceed twenty.

Since the Dairy Industry Act came into force there has been marked improvement in factory premises and in the quality of the butter produced. During the twelve months ended June, 1937—when the output was about 104,000,000 lb.—nearly 89 per cent. was marketed as choicest grade.

The supervision of dairy products for the oversea export trade is conducted by officers appointed by the Federal Government, under the Commerce (Trade Descriptions) Act of 1905-1933. Since 1st August, 1924, a national brand has been placed on all Australian butter graded for export as choicest quality. Regulations were made, with effect as from 1st July, 1937, fixing six grades of export butter, and requiring all exports to bear a national brand for "choicest" and a uniform brand for other grades which overshadows the brands of individual factories but indicates the State of origin. The trade description for "choicest" must contain the word "Australia" in the centre of a map of Australia; the name of the

State; the registered number of the factory; and the net weight. In addition, the factory may have added to the approved design a word or words used by the factory to denote its trade mark, so that butter from the individual factory may not entirely lose its identity. The Commonwealth Standardisation Mark (the kangaroo) is stamped on the top right-hand corner on all "choicest" quality butter after inspection by Commonwealth graders.

During the year ended June, 1937, Federal officers examined 477,309 boxes of New South Wales butter for oversea export from Sydney and Newcastle. Of these 376,114 boxes, or 78.8 per cent., were classed as choicest, 54,923 as first grade, 34,482 boxes as second grade, and 4,283 boxes as pastry butter; 7,507 boxes were prohibited from export.

The following table shows the quantities of butter of "choicest" grade included in the exports of the various States in 1926-27, 1930-31, and in each of the last three years. The figures include tinned, bulk and pat butter.

State.	1926-27.	1930-31.	1934-35.	1935-36.	1936-37.
New South Wales (Boxes, 56 lb)	382,485	629,869	1,104,126	521,921	376,114
Percentage of choicest ...	60.6	87.0	84.5	76.32	80.04
Victoria (Boxes, 56 lb.) ...	734,345	1,133,075	1,710,596	935,491	1,110,731
Percentage of choicest ...	79.8	37.5	40.5	56.93	64.91
Queensland (Boxes, 56 lb.) ...	486,122	1,240,966	1,902,736	832,871	233,509
Percentage of choicest ...	54.5	61.4	40.5	55.04	23.46
South Australia (Boxes, 56 lb.) ...	35,686	50,795	159,160	48,387	11,407
Percentage of choicest ...	63.6	15.6	4.1	29.26	7.26
Tasmania (Boxes, 56 lb.) ...	22,598	74,121	80,069	22,051	23,269
Percentage of choicest ...	78.0	21.3	44.2	26.23	36.59
Western Australia (Boxes, 56 lb.) ...	Nil.	Nil.	41,797	1,798	932
Percentage of choicest ...			5.9	4.01	2.72

An examination of the figures shown above discloses that 60.6 per cent. of the total quantity of butter submitted by New South Wales for export in 1926-27 was graded as "choicest." The proportion increased to 87 per cent. in 1930-31, but was lower in subsequent years. Nevertheless the proportion of choicest grade in New South Wales has been far in excess of the corresponding percentage in the other States, and has remained relatively high notwithstanding the adverse seasons experienced in 1935-36 and 1936-37.

#### DAIRYING ORGANISATIONS.

Most of the dairy factories in New South Wales are conducted on co-operative principles by associations of producers. Out of this system a number of organisations have been developed for promoting the interests of producers and for regulating domestic and export trade. Some of these organisations are federal in character.

#### *Advisory Boards.*

The principal advisory bodies are the Australian Agricultural Council, the Standing Committee on Agriculture, and State advisory boards. The State Advisory Board in New South Wales consists of official representatives of the State and Commonwealth Governments and six representatives of producers. The constitution and functions of the federal bodies named are described at page 515 of this volume.

*Export and Marketing Organisations.*

The Australian Dairy Produce Board is charged with the regulation of the export trade in dairy products, in terms of the Dairy Produce Export Control Act, 1924-36. As reconstituted in February, 1936, it has assumed the functions of the Australian Dairy Council then abolished. It is responsible for research and investigational work for the advancement and protection of the industry, standardisation of quality, increased production, and increased home consumption of milk products. The membership consists of a representative of the Commonwealth Government, nine members elected by co-operative butter and cheese factories, two elected by proprietary factories, four producer-elected representatives (one for each New South Wales, Victoria and Queensland and one for the remaining three States), and one representative elected by the Federal Council of the Australian Dairy Factory Managers' and Secretaries' Association. Exporters of butter and cheese operate under licenses issued by the Minister for Commerce, subject to terms and conditions which are prescribed on the recommendation of the Board. Contracts as to freight and marine insurance on shipments of dairy produce are made by the Board, and it maintains an agency in Great Britain to advise it as to market conditions and the disposal of dairy produce abroad. By an agreement the rate of ocean freight on butter shipped to the United Kingdom will remain at the existing rate for three years from 1st October, 1937. The expenses of the Board are paid by means of a charge on butter and cheese exported. The charges were 1-30d. per lb. on butter and 1-60d. on cheese exported in 1936-37, and it is proposed to increase these to 1-16d. and 1-30d. respectively.

*The "Paterson" Plan.*

A voluntary marketing scheme known as the "Paterson Plan" was inaugurated on 1st January, 1926, as an outcome of efforts towards stabilisation in the various butter-producing States.

The scheme was administered by a Federal organisation—the Australian Stabilisation Committee—and there were advisory committees in the States. A levy was imposed on all butter made in the factories, and from the funds provided in this way a bonus was paid on butter exported. Information regarding the functioning of this scheme is given in earlier editions of this Year Book.

*The Australian Equalisation Scheme.*

As from 1st May, 1934, the Paterson plan was superseded by a compulsory scheme. Legislation was passed by the States for the regulation of intrastate trade and by the Commonwealth for the control of trade in dairy products between the States. The proportion of butter or cheese which each manufacturer in a State is permitted to sell in the course of intrastate trade is determined from time to time under the authority of State legislation. The Federal law prescribed that these products might not be transported from one State to another except under license, and it was a condition that licensees must comply with the export quotas, determined by the Commonwealth. This ensured that the surplus production was removed from the Australian market.

The recent decision of the Privy Council in *James v. The Commonwealth*, where the power of the Commonwealth to control the movement of products as between States under similar legislation relating to the marketing of dried fruits was challenged, has indicated that in the exercise of

such control, constitutional powers were exceeded. A Federal referendum with the object of securing an appropriate amendment of the Constitution, taken on 6th March, 1937, failed to secure the assent of the electors, but the scheme is being continued by the voluntary co-operation of producers, who have entered into agreements to observe the quotas as determined. The States' legislation in regard to the stabilisation scheme has not been invalidated and the various State Boards have continued to function as hitherto.

The New South Wales Dairy Products Board consists of a Government representative appointed by the Minister of Agriculture, and six other members representing the proprietary and co-operative manufacturers and the Primary Producers' Union. The Board advises the Minister in determining the quotas of butter and cheese for home consumption, and may enter into arrangements with boards in other States for the purposes of stabilisation. Its administrative expenses are met by imposing a fee of 1s. per ton of butter and 6d. per ton of cheese manufactured. In order to facilitate the operation of the stabilisation scheme the members of the Dairy Products Boards of the States and other persons nominated by the boards have been organised as a limited company—the Dairy Produce Equalization Committee Ltd. The Committee enters into agreements with manufacturers in order to secure to them equal rates of returns from sales of dairy produce, and for this purpose may fix basic prices at which dairy produce sold in Australia or overseas is to be taken into account. A practical effect of the scheme is that the local trade, which is the more remunerative, and the export trade are distributed in equitable proportions amongst the manufacturers.

The quota of butter for local consumption in May and June, 1934, was 45 per cent. of production, the balance being for export. The corresponding quota for cheese was fixed for the first time in July, 1934, at 75 per cent. of production. The quotas are identical in all the States concerned in the scheme, viz., New South Wales, Victoria, and Queensland for butter, and in these States and South Australia for cheese. The quotas for local consumption in each month since July, 1934, are shown in the following statement:—

Month.	Butter.				Cheese.			
	1934- 35.	1935- 36.	1936- 37.	1937- 38.	1934- 35.	1935- 36.	1936- 37.	1937- 38.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
July ...	50	85	87½	87	75	82	95	85
August ...	55	75	71	82	75	75	76	71
September ...	50	55	51	57	75	58	52	52
October ...	33½	33½	35	39	37	42	41	41
November ...	26	27	32	34	44	37½	40	37
December ...	24	28	38	32	38	43	44	38
January ...	24	29	39	35	40	44	50	40
February ...	29	34	38	...	50	54	50	...
March ...	32	37½	41	...	58	62	53	...
April ...	43	50	49	...	61	70	69	...
May ...	47	69	66	...	61	94	82	...
June ...	68	87½	81	...	78	95	89	...

## DAIRY INSTRUCTION AND RESEARCH.

Educational and experimental work relating to dairying is conducted by the Department of Agriculture at the State experiment farms, and at the Hawkesbury Agricultural College. Scientific investigation is undertaken at the Glenfield Veterinary Research Station, which was assisted by a grant of £1,000 from the Australian Dairy Cattle Research Council in 1935-36. The McMaster Animal Health Laboratory (at the University of Sydney) of the Commonwealth Council for Scientific and Industrial Research is also active in pursuing investigations associated with the welfare of the dairying industry.

The breeds of stud cattle kept at the various farms are as follows:--At Cowra, Australian Illawarra Shorthorns; at Wollongbar, Guernseys; at Grafton and Bathurst, Ayrshires; at Wagga Wagga and Glen Innes, Jerseys. At the Hawkesbury Agricultural College a Jersey stud holds a prominent place.

In order to enable factory managers and butter-makers to improve their scientific knowledge, dairy-science schools are held for short terms at different dairying centres, and certificates are given to those who pass examinations in the grading of cream and in the testing of milk and cream. During the year 1936-37 there were eight schools and 98 students.

## HERD-TESTING.

The practice of herd testing enables the farmers to ascertain the productivity of individual cows, to cull unprofitable animals, and to retain the progeny of those of higher grade. The herd-testing movement is assisted by a grant from the Commonwealth Bank which amounted to £2,003 in 1935-36. For the year ended June, 1937, the Bank has undertaken to provide an amount equal to one-third of the governmental expenditure for herd testing up to a limit of £1,500.

For the testing of pure-bred stock registered in the various herd societies, there is an Australian recording scheme conducted on uniform lines throughout the Commonwealth by the Department of Agriculture of each State. Departmental officers control these tests and also the testing of other pure-bred, grade, and ordinary cows. For certified recording of cows registered in herd societies, the cows are milked dry under supervision before the monthly test is made. In other cases this preliminary requirement need not be observed. The majority of the milking herds on registered dairy farms are grade or ordinary cows.

The fee for testing is £3 5s. for any number of cows up to 20. Thereafter 2s. 9d. per cow is charged for each additional cow up to 40, and the charge declines by 6d. per cow in each successive group of 20 cows. Thus, cows in excess of 80 carry a fee of 1s. 6d. per cow. An additional fee of 3s. per cow is charged for registered pure-bred stock submitted for official recording for each certificate covering a period of 273 days, or, where desired, 365 days.

The number of cows tested in 1929-30 was approximately 100,000, but, due to adversity in the industry, herd testing was greatly curtailed in following years. Dry conditions, and the outbreak of ephemeral fever (three days sickness) early in 1937 rendered conditions unsatisfactory for herd testing in 1936-37. The number of cows tested in each of the last four years was:—

Year ended September.	Pure-Bred Cows.		Grade Cows Tested.	Total Cows Tested.
	For Certified Recording.	For Uncertified Records.		
1934	2,169	2,134	46,449	50,752
1935	2,393	1,896	38,918	43,207
1936	2,043	1,589	35,866	39,498
1937	2,054	1,674	34,595	38,323

#### DAIRY CATTLE.

In the dairy herds the Shorthorn preponderates. This breed was introduced into the Illawarra or South Coast districts in the early period of dairying, before the Shorthorn had been developed by English breeders into a beef-producing type. By an admixture with other strains, a useful type of dairy cattle, known as the Illawarra, has been developed. There is also a large number of Jersey cattle, and the popularity of the breed for the production of butter is increasing. The Ayrshire is well represented in the dairy herds. It is noted for hardiness, but is better suited for producing milk for human consumption as fresh milk than for the purposes of butter-making.

The number of cows used for milking in the State in each year since 1926 is shown below:—

As at 30th June.	In Registered Dairies.				Cows not in Registered Dairies being Milked.	Average Daily Number of all Cows in Milk during Year.
	Being Milked.	Dry.	Helpers.			
			Springing.	Other over one Year.		
	No.	No.	No.	No.	No.	No.
1926	472,273	278,967	59,194	83,731	90,336	632,331
1927	462,365	286,592	51,422	106,366	85,674	616,805
1928	465,773	290,914	53,022	108,397	84,731	615,700
1929	482,568	293,754	49,655	115,413	81,797	627,815
1930	487,919	289,896	55,285	126,394	80,455	623,196
1931	532,604	281,227	62,851	129,447	88,057	655,073
1932*	644,217	229,623	51,959	129,930	95,148	693,412
1933*	675,660	247,939	52,908	147,499	92,098	721,783
1934*	705,398	239,508	55,789	155,105	97,147	742,384
1935*	711,358	246,629	49,626	166,150	105,248	748,486
1936*	696,502	243,731	43,720	173,631	107,609	736,868

\* As at 31st March.

By reason of winter conditions prevailing at 30th June the number of cows in milk is usually smaller and the number of dry cows and springing heifers is usually greater than in the summer months. For those reasons the numbers shown in the foregoing table are not typical of the distribution of cows under the various headings throughout the year.

### *Dairy Farms.*

Under the Dairies Supervision Act, 1901-1930, every person who keeps cows to produce milk for sale for human consumption in any form must register his premises and conform to prescribed standards of cleanliness, etc. Some persons so registered, however, conduct operations on a very limited scale.

The following statement shows a comparison for the past ten years of the number of holdings of one acre and upwards used for dairying operations on a commercial scale:—

Year ended 30th June.	Holdings of one acre and upwards used principally for—				
	Dairying only.	Dairying and Agriculture.	Dairying and Grazing.	Dairying, Grazing and Agriculture.	Total used for Dairying.
1926	9,766	5,624	1,794	1,734	18,918
1927	10,075	5,529	1,350	1,892	18,846
1928	10,118	5,375	1,516	1,755	18,764
1929*	12,985	2,942	1,722	1,189	18,838
1930	13,294	3,170	1,607	1,034	19,105
1931	14,484	3,371	1,148	1,146	20,149
1932†	15,136	3,406	1,480	1,614	21,636
1933†	15,177	4,101	1,475	2,102	22,855
1934†	15,033	4,315	1,498	2,065	22,911
1935†	14,929	4,226	1,474	1,952	22,581
1936†	14,969	4,066	1,445	1,834	22,314

† Year ended 31st March.

\* From 1929 the basis of classification was amended.

As stated, the figures quoted above indicate the principal purposes for which the holdings were used. It is apparent that the great bulk of the dairy farmers specialise in dairying operations. When the quantity of maize or other grain grown is clearly in excess of the amount required for consumption on the farm and the surplus is intended for sale the holding is classed as "agricultural and dairying." In 1929 the basis of classification was changed so that holdings on which dairying was clearly the predominant activity are placed in the classification "dairying only."

### *Dairy Factories.*

Although there is some seasonal variation, approximately 80 per cent. of the milk production of the State is treated in factories either as cream or whole milk for the manufacture of butter, cream, cheese, or condensed milk, the balance being sold for consumption as fresh milk or used on the farms. Most of the factories are conducted on co-operative principles, with the dairy farmers as shareholders, and are situated in the country districts at convenient centres. Particulars of the operations of the butter factories are shown in the chapter "Factories" of this Year Book.

## DAIRY PRODUCTION.

The following statement shows the estimated yield of milk in each division of the State during the year ended the 31st March, 1936, also the production of butter, cheese and bacon—the figures for these three items being factory production during the year ended 30th June, 1936, and the farm production during the year ended three months earlier:—

Division.	Estimated Yield of Milk.	Butter Made.	Cheese Made.	Bacon and Ham Made.
	gallons.	lb.	lb.	lb.
<b>Coastal—</b>				
North Coast ... ..	149,611,619	*68,658,749	870,053	8,266,299
Hunter and Manning ... ..	66,178,199	24,602,467	1,017,297	1,501,586
Metropolitan ... ..	17,749,607	508,605	41,529	9,577,396
South Coast ... ..	47,627,132	12,533,701	5,426,461	625,245
<b>Total</b> ... ..	281,166,557	106,303,522	7,355,340	19,970,526
<b>Tableland—</b>				
Northern ... ..	6,250,966	1,662,852	60	405,920
Central ... ..	9,789,627	2,698,845	316	126,827
Southern ... ..	3,605,513	730,334	300	53,699
<b>Total</b> ... ..	19,646,106	5,092,031	676	586,446
<b>Western Slopes—</b>				
North ... ..	8,098,809	2,366,230	...	62,965
Central ... ..	5,282,556	1,741,691	...	84,573
South ... ..	20,035,343	†7,919,047	12	1,160,708
<b>Total</b> ... ..	33,416,708	12,026,968	12	1,308,246
<b>Plains—</b>				
North Central ... ..	1,335,018	162,821	100	13,118
Central ... ..	1,556,014	212,059	...	25,990
Riverina ... ..	7,162,823	1,329,005	75	151,943
<b>Total</b> ... ..	10,053,855	1,703,885	175	191,051
<b>Western Division</b> ... ..	1,063,028	42,890	...	1,189
<b>Total, 1935-36</b> ... ..	†345,346,254	*†125,169,296	7,356,203	22,057,458

\* Includes 346,208 lb. made from Queensland cream. † Includes 556,647 lb. from Victorian cream.

‡ Includes 3,703,738 gallons sent to interstate factories as cream.

This statement illustrates the importance of dairying activities in the coastal division as compared with the remainder of the State. In this area about 86 per cent. of the cows in registered dairies are depastured, and approximately 83 per cent. of the total output of milk, 85 per cent. of the butter, and practically the whole of the cheese are produced. Fifty-five per cent. of the butter of the State was made in the North Coast division. The Hunter and Manning division is next in importance, then the South Coast, followed by the South Western Slopes. Formerly the South Coast division was the principal dairying region, but in recent years the industry has made rapid progress in the northern districts, where many large estates, used previously for raising cattle for beef, have been subdivided into dairy

farms. The growth of dairying in inland districts has latterly been appreciable. Relatively to the State as a whole the proportions for non-coastal areas rose between 1929-30 and 1935-36 from less than 10 per cent. to 14 per cent. of the dairy cows, from 13 per cent. to 17 per cent. of the output of milk, and from 10 per cent. to 15 per cent. of the butter produced. The manufacture of cheese is of small extent when compared with the manufacture of butter, and more than one-half of the total output is made in the South Coast division. The curing of bacon and ham is confined almost entirely to the Coastal division, where about 90 per cent. of the output is produced.

A graph is published on page 649 illustrating the production of butter, cheese and bacon in each year since 1890.

### *Milk.*

Particulars of the consumption and supply of milk and milk products are published in the chapter "Food and Prices" of the Year Book.

Cows used for producing milk for sale are inspected by Government officers, who have power to condemn and prevent the use of diseased animals. The standard of milk sold for human consumption is prescribed, the quality of the milk sold is tested frequently, and prosecutions are instituted where deficiencies are found. By these means the purity and wholesomeness of dairy products are protected.

Under the Milk Act, 1931, a Board regulates and controls the supply of milk and cream within the metropolitan and Newcastle districts. Its functions include the improvement of methods of collecting and distributing milk and fixation of prices. In 1936 an investigator was appointed to inquire into and report upon the working of the Milk Act and its administration. The investigator's report was submitted to the Governor on 29th January, 1937.

The total yield of milk can be estimated only approximately. Few dairy farmers actually measure the quantity of milk obtained from their cows throughout the year. The majority are concerned principally in producing cream for manufacture into butter. In recent years, however, it has been found possible to make checks against supplies to factories, and results show that the farmers' estimates are approximately correct. Moreover, the testing of dairy herds has developed so far as to give a fair indication of the butter-fat contents of the milk.

### *Average Yield per Cow.*

While sufficient information is not available to show conclusively the average annual production of milk per cow in New South Wales an approximate estimate of the productivity per cow in registered dairies in terms of commercial butter is published below. For the purposes of this estimate it is assumed that the mean of the number of cows in milk and dry at the beginning and end of any given year represents the average number kept for milking in registered dairies during that year, and an estimate is made (on the basis of butter fat content) of the quantity of commercial butter which may be produced from milk used for purposes other than butter-making.

The following table relates to all cows in registered dairies, and covers a period of eleven years:—

Year ended 30th June.	Cows Dry and in Milk in Registered Dairies at end of Year.	Estimated Number of Cows Dry and in Milk in Registered Dairies during Year.	Butter Produced.		Estimate of Commercial Butter Produceable from Milk of Cows in Registered Dairies used for other Purposes.	Total Commercial Butter Produced or Produceable from Milk of Cows in Registered Dairies.	Estimated Production of Commercial Butter per Cow.
			In Factories from Milk produced in New South Wales.	On Registered Dairy Farms.			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	
			Thousand lb.				lb.
1926	751,240	744,321	101,698	1,216	22,994	125,908	169·1
1927	749,957	750,598	91,029	1,202	23,122	115,353	153·7
1928	756,687	753,322	96,246	1,276	24,945	122,467	162·6
1929	776,322	766,504	91,424	1,091	24,328	116,843	152·4
1930	777,815	777,069	100,603	1,025	23,783	125,411	161·4
1931	813,831	795,823	109,133	1,113	23,777	134,023	168·4
1932*	873,840	843,836	119,372	1,437	22,930	143,739	170·3
1933*	923,599	898,720	126,266	1,624	24,240	152,120	169·3
1934*	944,906	934,252	141,762	1,606	26,329	169,697	181·6
1935*	957,987	951,446	145,843	1,635	26,740	174,218	183·1
1936*	940,233	949,110	119,195	1,683	27,878	148,756	156·7

\* Year ended 31st March.

The estimated number of cows dry and in milk in registered dairies during the year shown in the column B above represents the mean of the total numbers at the beginning and end of the year concerned as shown in column A. The estimated production per cow shown in column G is obtained by dividing the average number of cows (column B) into the total commercial butter for respective years shown in Column F. It represents, therefore an average covering all cows kept for milking in registered dairies irrespective of periods of lactation, and includes heifers with first calf, aged cows, and cows disabled from any cause.

The averages shown in the table should be considered in conjunction with the index of rainfall in dairying districts published below. It is evident that productivity per cow has been maintained and even slightly increased in the recent years despite the unevenness of the rainfall, and the accession of new, and probably less efficient, producers. The sharp decline in 1935-36 was occasioned by the very dry conditions experienced in that year.

#### RAINFALL INDEX—DAIRYING DISTRICTS.

The following table provides a monthly index of rainfall in the coastal dairying districts of New South Wales. The index represents the ratio of

actual to normal rainfall in each month, normal being the average over a long period of years and represented by 100 in all cases.

Month.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
July ...	28	88	15	101	61	61	76	77	197	207	93	43
August ...	164	51	16	52	92	93	54	55	20	128	44	42
September ...	21	64	113	102	90	30	50	230	180	156	196	77
October ...	54	36	124	64	240	113	51	93	170	95	102	55
November ...	210	9	255	34	82	41	131	110	161	105	45	23
December ...	118	170	111	57	49	89	181	42	160	116	93	179
January ...	77	226	130	96	103	48	28	148	97	92	88	99
February ...	16	75	205	347	68	181	59	31	198	130	79	139
March ...	127	97	86	119	148	123	43	52	51	97	128	199
April ...	117	207	142	146	132	215	94	164	198	70	58	63
May ...	86	30	73	76	174	74	93	56	180	58	94	11
June ...	124	67	175	160	351	47	47	178	55	28	48	187
Average for Season ...	95	93	120	112	132	93	76	103	139	107	89	93
Commercial butter per cow*	169.1	153.7	162.6	152.4	161.4	168.4	170.3	169.3	181.6	183.1	156.7	...

\* See previous table.

The average for the season is the mean of the monthly averages. The seasonal distribution of rainfall is an important factor in relation to production. See table page 650.

#### Use of Milk.

The following statement shows the estimated amount of milk used for various purposes during each of the last three years:—

	1933-34. gallons.	1934-35. gallons.	1935-36. gallons.
Used for butter—			
On farms ...	16,383,000	17,297,304	17,646,465
In factories in New South Wales ...	278,486,000	261,863,852	248,081,973
In other States ...	3,111,000	5,390,102	3,703,738
	297,980,000	284,551,258	269,432,176
Used for cheese—			
On farms ...	220,000	241,592	306,456
In factories ...	9,497,000	8,440,316	7,265,145
	9,717,000	8,681,908	7,571,601
Used for sweet cream, ice cream, condensing, etc. ...	6,494,000	7,222,232	8,052,761
Pasteurised for metropolitan and Newcastle markets ...	19,221,000	19,831,579	21,442,065
Balance sold and used otherwise	35,279,000	37,172,182	38,847,651
Total ...	368,691,000	357,459,159	345,346,254

The milk used in 1935-36 for making butter represented 78.0 per cent. of the estimated total production; 2.2 per cent. was used for cheese; 2.3 per cent. for condensed milk, cream, ice-cream, etc.; and the balance—17.5 per cent.—was consumed as fresh milk or used otherwise.

An estimate of the quantity of fresh milk used for human consumption is shown in the chapter relating to "Food and Prices."

### BUTTER.

The following statement shows the quantity of butter made annually at intervals since 1901. The figures include the butter made in factories from cream produced in other States, the quantity in 1935-36 being 902,855 lb.

Year ended 30th June.	On Farms.	In Factories.	Total.	Year ended 30th June.	On Farms.	In Factories.	Total.
Thousand lb. (000 omitted.)							
1901*	4,775	34,282	39,057	1930	4,208	100,814	105,022
1906*	4,637	54,304	58,941	1931	4,910	109,292	114,202
1911*	4,632	78,573	83,205	1932	5,399†	118,448	123,847
1916	4,258	55,374	59,632	1933	5,306†	123,625	128,931
1921	4,388	79,880	84,268	1934	5,660†	143,208	148,868
1926	5,270	101,698	106,968	1935	5,948†	140,158	146,106
1929	4,511	91,733	96,244	1936	6,046†	119,123	125,169

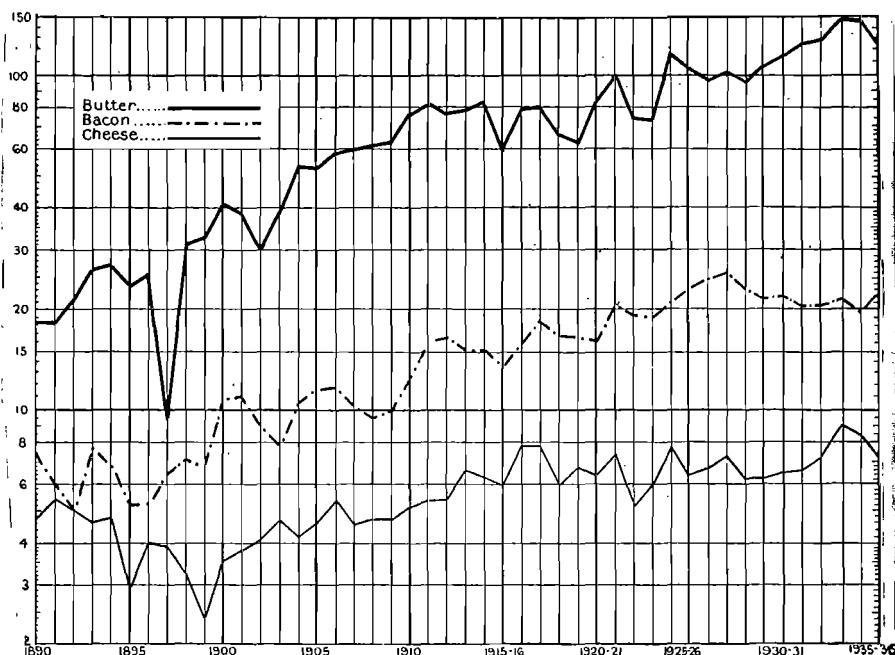
\* Calendar year.

† Year ended 31st March.

The above table and the graph which follows reveal a very pronounced increase in production during the years 1930 to 1934, in which latter year the output attained record proportions. Whilst better dairy practice and increased attention to pasture improvement and fodder conservation were appreciable factors, the expansion was, as to the greater part, attributable to efforts of established producers to quantitatively offset poor prices, and to many agriculturists and graziers entering upon dairying to augment shrinking incomes from other forms of rural activity (as illustrated by the table at page 643). Production declined sharply in 1935-36 and 1936-37, but principally owing to the adverse seasonal conditions experienced in the main dairying centres of the State, aggravated by an epidemic of ephemeral fever ("three days sickness") in the latter year.

## DAIRY PRODUCTION, 1890 to 1935-36.

Ratio graph.



The numbers at the side of the graph represent 1,000,000 lb.

The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise or fall according to the rate of increase or decrease. Only in this respect can the curves be directly compared. Actual quantities are shown by means of the numbers at the side of the graph:

*External Trade in Butter.*

Particulars of the external trade in butter during each of the last five seasons are summarised in the following statement (the particulars of the interstate movement are approximations):—

Particulars.	1931-32.	1932-33.	1933-34.	1934-1935.	1935-36.
Imports:—	lb.	lb.	lb.	lb.	lb.
Interstate ...	1,128,000	1,122,300	1,594,600	2,961,300	5,550,100
Oversea ...	434	2,239	162	930	3,612
Total Imports ...	1,128,434	1,124,539	1,594,762	2,962,230	5,553,712
Exports:—					
Interstate* ...	2,336,900	3,237,100	3,470,700	3,974,100	2,814,400
Oversea—					
Australian produce ...	39,463,306	42,487,143	59,237,511	57,672,403	32,818,757
Ships' Stores—					
Australian produce ...	359,768	414,020	397,115	356,514	458,892
Total Exports ...	42,159,974	46,138,263	63,105,326	62,003,017	36,092,049
Excess of Exports	41,031,540	45,013,724	61,510,564	59,040,787	30,538,337

\* Includes butter sent to Queensland for shipment oversea.

*Production and Exports of Butter Monthly.*

The following table shows the quantity of butter produced in factories in New South Wales and the quantity exported oversea from New South Wales in each month since July, 1932. Butter may be stored for a considerable period before export, and the figures for production and export

each month do not necessarily refer to the same butter. The export figures indicate the quantity of Australian butter exported overseas from ports in New South Wales. In addition, a large quantity is sent from New South Wales to Queensland, whence it is transhipped abroad.

Month.	Quantity of Butter Produced in Factories.*				Quantity of Butter Exported Oversea (Australian Produce).			
	1932-34.	1934-35.	1935-36.	1936-37.	1933-34.	1934-35.	1935-36.	1936-37.
	Thousand lb.							
July ...	5,929	5,688	4,575	4,990	604	568	281	982
August ...	6,306	6,340	4,853	5,569	1,155	707	225	310
September ...	8,102	8,828	6,768	6,841	1,357	1,505	363	450
October ...	13,046	14,558	10,802	9,206	3,610	5,338	2,030	1,194
November ...	15,607	15,927	12,970	8,336	8,186	7,144	5,022	1,582
December ...	17,606	16,856	13,355	7,917	8,139	7,526	3,491	920
January ...	18,293	17,489	14,411	13,263	9,471	6,911	4,522	1,282
February ...	14,950	15,172	13,204	11,881	8,329	11,856	4,714	3,071
March ...	15,480	15,229	13,324	13,363	5,552	6,867	5,853	4,210
April ...	12,084	11,318	11,140	10,373	5,367	6,024	2,600	3,187
May ...	1,135	7,786	7,809	7,415	4,797	2,911	1,712	2,417
June ...	6,690	4,967	5,912	4,821	2,671	315	2,006	761
Total ..	143,208	140,158	119,123	103,975	59,238	57,672	32,819	20,366

\* Compiled from monthly returns of Dairy Branch of the Department of Agriculture.

These monthly records show the pronounced seasonal nature of the production, with the consequent monthly variations in the volume of exports. Production increases in a marked degree during the summer months and decreases during the winter, reaching a minimum usually in July.

More than 90 per cent. of the butter exported overseas from New South Wales is sent to the United Kingdom, the remainder being sent mainly to countries bordering the Pacific Ocean.

The effect of the policy of the Dairy Produce Board of regulating shipments can be seen in the figures for the closing months of 1935-36. Effective regulation was rendered impracticable in the latter part of 1936-37 by the paucity of exportable supplies. It is believed that in addition to promoting better trade connections in the British market by assuring continuity of supply, the more orderly method of marketing will result in higher values being secured.

The principal sources from which butter was imported into the United Kingdom during each of the last eleven years, are shown below:—

Year ended June.	Imports of Butter into the United Kingdom from—					
	Australia.	New Zealand.	Denmark.	Argentina.	Other Countries.	Total Imports.
	tons.	tons.	tons.	tons.	tons.	tons.
1927	30,216	56,534	97,795	26,498	77,596	288,639
1928	33,582	67,343	100,349	17,921	84,552	303,747
1929	43,116	64,636	105,162	17,034	87,527	317,475
1930	41,158	65,406	111,925	15,706	89,377	323,662
1931	62,357	87,491	118,149	21,358	70,905	360,260
1932	80,947	102,955	125,698	19,504	83,205	412,309
1933	97,401	114,429	131,748	13,573	81,676	438,827
1934	94,304	137,105	129,944	6,030	113,044	480,427
1935	114,472	125,499	111,506	4,771	113,079	469,327
1936	87,541	136,002	106,996	4,164	138,707	473,410
1937	71,110	144,642	113,785	8,907	146,478	484,922

In 1934-35 Australia was second in importance as a source of supply, surpassing Denmark for the first time. The subsequent decline in exports from Australia is a reflection of the marked fall in production, principally in this State and in Queensland, brought about by the adverse seasons, and the contraction of output due to the epidemic of ephemeral fever in 1936-37. Less Australian butter arrived in the United Kingdom in 1936-37 than in any of the preceding five years.

### *Prices of Butter.*

The average monthly wholesale prices of butter in Sydney and London markets during each of the past six seasons are shown below:—

Month.	Average Price in Sydney of Choicest Butter per cwt. (Local Sales). (Australian currency).*			Average Top Price in London of Choicest Australian Butter per cwt. (Sterling).						
	1931-32	1932-33	1933-34	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37.	
	s.	s.	s.	s.	s.	s.	s.	s.	s.	s.
July ... ..	154	147	135	110	102	80	69	88	113	
August ... ..	154	149	135	110	102	90	75	94	118	
September ... ..	148	149	138	108	106	103	72	110	108	
October ... ..	154	139	132	115	100	99	68	117	100	
November ... ..	149	127	113	109	90	82	74	101	108	
December ... ..	134	121	112	104	85	69	71	89	98	
January ... ..	131	121	112	99	81	64	81	94	94	
February ... ..	134	115	112	104	75	66	86	93	86	
March ... ..	140	107	113	106	73	70	73	84	97	
April ... ..	148	107	126	105	67	69	74	87	103	
May ... ..	136	118	140	97	77	74	77	94	106	
June ... ..	139	133	140†	98	79	74	85	106	108	

\* Excluding the usual box charge of 2s. 6d. per cwt. † The price, 140s., fixed in April, 1934, was unaltered until raised to 149s. 4d. on 29th June, 1937, which price still rules.

The prices quoted in the table for Sydney and London respectively may not be used to estimate the difference between the actual selling price in Sydney and the local parity of London prices. The Sydney price is an average of daily prices and relates to the price fixed by the Equalisation Committee for butter of choicest quality. The London prices are the mean of the top prices quoted weekly for choicest salted Australian butter.

A table of monthly exports on the preceding page shows the variation in monthly shipments from New South Wales to London.

### *Prices Received by Dairy Farmers.*

There has been some improvement in prices, but though the average price to suppliers was higher in 1935-36 than in any of the preceding four years, the average compared very unfavourably with that received in pre-depress-

sion years. The benefit to dairy farmers has been offset by the decline in production, and higher costs incurred in maintaining the herds during periods of shortage of natural pastures. Moreover, the improvement in price in 1935-36 was due, in great measure, to the increased proportion of the output of butter sold on the local and more remunerative market, though better oversea prices were also a factor.

The average prices paid to dairy farmers for cream supplied to butter factories in recent years, inclusive of deferred pay, are shown below, the averages being stated as per lb. of commercial butter:—

Year.	Average Price to Suppliers.	Year.	Average Price to Suppliers.	Year.	Average Price to Suppliers.
	d.		d.		d.
1923-24 ...	16.6	1928-29 ...	17.1	1933-34 ...	8.4
1924-25 ...	13.0	1929-30 ...	15.8	1934-35 ...	9.4
1925-26 ...	15.8	1930-31 ...	12.6	1935-36 ...	11.4
1926-27 ...	16.2	1931-32 ...	11.2	1936-37 ...	12.4
1927-28 ...	16.0	1932-33 ...	9.4		

The average price per pound of commercial butter paid monthly to suppliers of cream to the principal factories in the North Coast district has been as follows:—

Month.	1920-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Pence per lb.								
July ...	17½	15	12	11½	10½	9½	12	12½
August ...	17½	14½	12	12	10½	10	12	12½
September ...	17½	13	12	12	11	9	11½	11
October ...	17½	11½	12½	10½	9	8	11½	10½
November ...	15	10½	11½	9	7½	7½	10	11
December ...	15	10½	10	8½	7	7½	8½	10½
January ...	15	12	9½	8½	6½	9½	9½	10
February ...	13½	13½	10½	7½	6½	9	9½	10
March ...	13	12½	10½	7½	7	8½	9½	11
April ...	13	11½	11½	7½	8	9½	10½	11½
May ...	14	11½	10½	9	9½	10½	11½	12½
June ...	14½	12	10½	10½	9½	11½	12½	12½

In addition, deferred payments representing half-yearly adjustments ranging from ½d. to 1½d. per lb. were paid to suppliers.

### CHEESE.

Excellent conditions exist in New South Wales for the production of cheese, but cheese-making has not advanced to the same extent as the manufacture of butter, the latter being more profitable. An earlier table showing the cheese made in the various divisions of the State shows that nearly two-thirds of the production is made in the South Coast division.

The following table shows the production of cheese in factories and on farms and the import and export of cheese from New South Wales at intervals since 1901:—

Year ended 30th June.	Production.			Import.		Export.
	In Factories.	On Farms.	Total.	Oversea.	Interstate (incomplete).	Oversea. ‡
	lb.	lb.	lb.	lb.	lb.	lb.
1901*	2,428,599	1,410,236	3,838,835	1,862,000	399,000	191,000
1906*	3,459,641	1,999,004	5,458,645	115,000	359,000	133,600
1911*	4,617,387	843,265	5,460,652	129,000	†	141,400
1916	4,969,374	1,010,262	5,979,636	479,000	†	301,200
1921	5,965,715	441,494	6,407,209	31,000	†	806,700
1926	6,321,111	141,424	6,462,535	736,000	1,288,000†	284,000
1929	6,203,409	135,643	6,339,052	256,000	2,924,000	229,300
1930	6,163,295	182,490	6,345,785	216,000	4,097,000	219,400
1931	6,425,093	90,972	6,516,065	18,000	3,086,000	188,900
1932	6,476,737	113,620	6,590,357	7,200	3,254,000	191,000
1933	7,053,566	140,240	7,193,806	51,600	2,778,000	452,000
1934	8,864,126	203,382	9,072,508	28,200	2,855,000	736,700
1935	8,220,229	225,239	8,445,468	38,700	2,648,000	2,136,100
1936	7,060,100	296,103	7,356,203	40,440	3,568,000	540,010

\* Calendar year. † Not available. ‡ Excluding imports by rail. § Including Ships' Stores.

The annual output of cheese, which had shown no permanent expansion for many years, began to increase in 1932-33, and in 1933-34 was nearly 37 per cent. above the average output for the five years ended 1930-31, and a record. The subsequent decline may be attributed to the adverse seasons experienced. Cheese-making on farms was formerly extensive, but in recent years has represented only a small proportion of the total production.

#### PIGS.

The following table shows the average number of pigs in New South Wales at quinquennial intervals since 1891 and in each of the last ten years:—

Average—Five Years ended.	Number of Pigs.	At 30th June.	Number of Pigs.
1890 (Dec.)	248,783	1927	332,921
1895 „	248,105	1928	301,819
1900 „	233,186	1929	311,605
1905 „	264,357	1930	323,499
1910 „	246,964	1931	334,331
1916 (June)	304,140	1932*	385,846
1921 „	322,146	1933*	388,273
1926 „	354,015	1934*	367,116
1931 „	320,835	1935*	397,535
1935 (March)	374,620	1936*	436,944

\* At 31st March.

The number of pigs in New South Wales in 1936 (436,944) was the highest on record. Although previously the greatest number of pigs in any year was recorded in 1918 (396,157) the quinquennial averages in the table indicate the five years ended June, 1926, as the former period of greatest activity in pig raising. The upward trend was temporarily disturbed by an outbreak of swine fever, but since 1929, probably as an accompaniment to the expansion of dairying activities, an almost uninterrupted increase has carried the average for the five years ended 1935 appreciably above that for any previous similar period. The extent of pig breeding, however, is not accurately reflected in variations in the number of pigs at the end of the year, but rather in the extent of slaughtering in conjunction with increase or decrease in numbers. A comparison of two periods of five years is shown below:—

Year ended 30th June.	Increase (+) or Decrease (—).	Number Slaughtered.	Year ended 31st March.	Increase (+) or Decrease (—).	Number Slaughtered.
1927 ... ..	(—) 49,753	461,981	1932 ... ..	(+) 51,515	425,385
1928 ... ..	(—) 31,102	412,424	1933 ... ..	(+) 2,427	452,807
1929 ... ..	(+) 9,786	406,187	1934 ... ..	(—) 21,157	461,205
1930 ... ..	(+) 11,894	405,639	1935 ... ..	(+) 30,419	505,059
1931 ... ..	(+) 10,832	417,502	1936 ... ..	(+) 39,409	595,624
Total ... ..	(—) 48,343	2,103,733	Total ... ..	(+) 102,613	2,440,080

At 31st March, 1936, the pigs less than one year old numbered 326,785, and the pigs aged one year and over 110,159; the latter are mainly breeding stock.

The following statement shows the number of pigs in various divisions of the State in various years since 1911:—

Division.	1911. December.	1921. June.	1926. June.	1931. June.	1935. March.	1936. March.
North Coast ... ..	111,710	117,220	174,396	152,243	161,913	186,812
Hunter and Manning ... ..	74,185	49,424	70,670	64,287	74,587	79,169
Metropolitan ... ..	25,056	20,863	20,182	16,924	17,600	18,498
South Coast ... ..	44,410	21,396	34,922	26,958	29,432	32,396
Total, Coastal ... ..	255,361	208,903	300,170	260,412	283,532	316,875
Tablelands ... ..	45,578	29,700	26,366	20,553	27,648	27,425
Western Slopes ... ..	42,258	39,599	36,537	35,503	57,135	61,951
Other ... ..	27,896	28,061	19,601	17,863	29,220	30,693
Total, New South Wales ... ..	371,093	306,253	382,674	334,331	397,535	436,944

Sixty per cent. of the pigs at 31st March, 1936, were in the North Coast and Hunter and Manning divisions. Pig-raising appears to have declined in the South Coast and tableland districts, but there has been an appreciable increase on the Western Slopes since 1929.

*Bacon and Hams:*

The output of bacon and hams from factories and farms in New South Wales and the net interstate imports (as far as recorded) at intervals since 1901 are shown hereunder:—

Year ended 30th June.	Production of Bacon and Ham.			Net Import of Bacon and Ham Interstate (Incomplete.)
	Factory.	Farm.	Total Production.	
	lb.	lb.	lb.	lb.
1901*	7,392,100	3,688,800	11,080,900	1,216,700
1911*	13,393,500	2,709,300	16,102,800	†
1916	11,637,900	1,938,700	13,576,600	†
1921	14,625,800	1,631,400	16,257,200	†
1926	21,548,888	1,409,483	22,958,371	9,500,000
1929	22,340,106	747,165	23,087,271	8,300,000
1930	20,984,249	632,223	21,616,472	9,900,000
1931	20,984,266	916,928	21,901,194	8,400,000
1932	19,442,931	1,025,328†	20,468,259	7,400,000
1933	19,250,875	1,225,680†	20,476,555	6,446,000
1934	19,963,793	1,127,794†	21,091,587	6,982,900
1935	18,709,766	957,853†	19,667,619	7,979,700
1936	21,155,669	901,789†	22,057,458	8,418,000

\* Calendar year. † Not available. ‡ Year ended 31st March.

During the first decade of the period under review, and between 1921 and 1926, the production of bacon showed a substantial increase, but there has been a decline since 1929, and apparently the greater quantity of pig meat available has been used as pork. The oversea export of pig products (including pork, bacon and ham) from New South Wales in 1935-36 totalled 14,162 cwt. (including 10,477 cwt. of pork) compared with 12,396 cwt. in 1934-35 and 5,810 cwt. in 1931-32.

*Lard.*

Statistics showing the total production of lard are not available. During the year ended 30th June, 1936, the quantity extracted in factories amounted to 862,864 lb., valued at £17,950, but as manufacture is conducted in many other establishments, as well as on farms, this quantity represents only a portion of the total output.

During the twelve months ended 30th June, 1937, the oversea exports of lard and refined animal fats compared with those for the preceding year (shown in parenthesis) amounted to 569,808 (383,861) lb., valued at £13,904 (£9,811), and imports from oversea countries to 6,398 (3,864) lb., valued at £220 (£124).

## EXPORTS OF DAIRY PRODUCTS.

Dairy products for export beyond the Commonwealth are subject to inspection by Federal Government officials under the provisions of the Commerce (Trade Descriptions) Act, 1905-1933, and the exportation of inferior products is prohibited unless the goods are labelled as below standard. Since August, 1925, the export of butter and cheese has been supervised by the Australian Dairy Produce Board, of which particulars are given on an earlier page.

The following table shows the oversea exports of the principal dairy products from New South Wales, inclusive of ships' stores, at intervals since 1891. The particulars for 1906 and earlier years relate to New South Wales produce only, but in later years the figures include a small quantity of

produce of other Australian States. New South Wales produce exported through other States is excluded from account. Since 1934-35 a substantial quantity of butter from New South Wales has been shipped abroad from Brisbane, Queensland.

Year ended 30th June.	Oversea Exports (including Ships' Stores).							
	Butter.		Cheese.		Milk—Preserved, Condensed, etc.		Bacon and Ham.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lb. (000)	£	lb. (000)	£	lb. (000)	£	lb. (000)	£
1891*	11	478	18	411	...	...	9	380
1896*	1,912	75,994	45	821	8	156	40	994
1901*	8,700	379,342	191	4,359	196	2,525	96	3,007
1906*	23,362	978,725	134	3,268	258	4,906	141	4,996
1911*	33,044	1,518,993	141	3,723	1,127	17,471	618	17,561
1916	4,306	259,834	301	9,767	947	22,052	224	11,279
1921	28,429	3,458,280	807	49,813	11,576	691,122	1,357	132,075
1926	27,008	1,943,586	284	12,321	656	26,513	790	61,681
1929	15,880	1,192,141	229	11,838	477	19,446	612	48,883
1930	20,328	1,443,851	219	11,624	452	18,222	520	39,585
1931	31,793	1,698,835	189	8,969	497	18,006	552	28,646
1932	39,823	2,010,246	191	8,756	650	22,957	530	28,126
1933	42,901	1,832,362	464	18,021	852	32,340	539	38,936
1934	59,635	2,149,546	800	25,745	865	30,313	671	30,435
1935	58,028	2,182,429	2,136	55,413	2,569	196,668	591	33,825
1936	33,278	1,675,728	540	18,228	2,592	194,207	631	36,286
1937	20,787	1,033,007	424	15,724	2,342	154,923	740	41,182

\* Calendar year.

The values of other dairy and farmyard products exported overseas in 1935-36 and 1936-37 were successively as follows:—Frozen pork, £28,700 and £33,043; frozen poultry, £21,447 and £23,598; eggs, £263,595 and £324,105; live pigs and poultry, £965 and £693; making a grand total of £2,239,150 and £1,626,274; including the items listed in the foregoing table.

### POULTRY-FARMING.

Poultry-farming was conducted formerly in conjunction with dairying; but the interests involved have become important commercially, and a distinct industry has been developed. Returns collected as at 31st March, 1936, showed that there were 2,429 holdings of one acre or more in extent devoted mainly to poultry farming. In addition, many smaller holdings not included in these returns are used for raising poultry as a commercial pursuit, and farms utilised mainly for agriculture, dairying or grazing, carry large numbers of poultry. The returns showed that at 31st March, 1936, there were 3,296 holdings, carrying poultry for commercial purposes to the extent of 150 head or more. Of these, 2,278 were in the county of Cumberland and 648 in other coastal districts.

The figures quoted show a decrease during 1935-36 of 178 or of about 5 per cent. in the number of commercial poultry farms which was probably attributable to the abandonment of poultry farming by some persons who entered the industry during the years of depression. Owing to the relatively small area of land required for poultry farming it has been difficult to obtain a complete survey, but with special facilities becoming available

it was possible to widen the scope of the collection in 1935. The higher figures in comparison with earlier years are thus to be interpreted in this light rather than as implying a major expansion of the industry.

The greatly increased cost of poultry feed, which had not been offset by a comparable increase in the price of eggs, caused financial embarrassment to many producers. It has been estimated that between 1935 and 1937 the cost of maintenance per hen rose by about 60 per cent. In August, 1937, the State Government made available an amount of £10,000 for advances through the Rural Bank to necessitous poultry farmers for the purchase of chickens or of the feed for rearing them. Individual advances may not exceed £40 and repayment of the loans, with interest, are to commence on 1st July, 1938, and extend over a period of nine months from that date. Poultry farmers securing loans are required to market their eggs through the Egg Marketing Board and to give the Rural Bank an order on the Board as a lien against egg consignments as a guarantee of repayment of advances.

Accurate statistics of poultry production are not available, but a general estimate based on recorded production indicates that the farm value of production during 1935-36 was approximately £3,439,000.

Special attention is devoted to improving the laying qualities of the different breeds, and egg-laying competitions, organised originally by private subscriptions, have been conducted since 1901 at the Hawkesbury Agricultural College. These competitions attract widespread interest among poultry-farmers. The most successful laying strains have proved to be the black orpington, the white leghorn and the langshan and an Australian strain, the australorps, is also popular. An annual report in bulletin form, giving particulars and tabulated results of these competitions, is issued by the Department of Agriculture. There is a poultry expert and staff carrying out experimental work and assisting poultry farmers with the selection of breeding stock, culling of hens, and in dealing with general problems associated with the industry. Owing to the ease with which poultry diseases spread a system of quarantine is in operation, and the greatest care is taken to obviate the introduction of endemic diseases from beyond the State, and to combat outbreaks of local origin.

The numbers of poultry enumerated in returns supplied annually under the Census Act are shown below. The data afford some guidance as to the trend of the industry during the last few years, but in view of the difficulty of obtaining satisfactory records it is probable that the number of poultry in the State is much greater than the figures shown in the table:—

As at 30th June.	Fowls, Chickens, etc.	Ducks, etc.	Geese, etc.	Turkeys, etc.	Guinea Fowl, and other.
1925	4,000,000	159,000	19,000	162,000	4,600
1926	4,020,000	156,000	21,000	159,000	6,300
1927	4,002,000	131,000	20,000	148,000	5,100
1928	3,968,000	123,000	17,000	147,000	6,900
1929	3,919,000	120,000	16,000	130,000	5,700
1930	3,798,000	100,000	15,000	127,000	3,700
1931	4,238,000	140,000	18,000	165,000	4,800
*1932	4,499,000	174,000	25,000	242,000	7,000
*1933	4,627,000	181,000	28,000	216,000	11,000
*1934	4,842,000	198,000	27,000	225,000	9,000
*1935	5,251,000†	219,000	31,000	244,000	12,000
*1936	5,263,000	202,000	30,000	232,000	11,000

\* As at 31st March.

† Increase principally due to more comprehensive collection of returns (see above).

The numbers shown above include poultry recorded on holdings with less than 150 stock—2,998,737 in 1936—also the number of poultry, as estimated by local collectors, on holdings other than those used for agricultural and pastoral purposes.

The statistics shown below are compiled from returns collected under the Census Act in respect of farms with at least 150 head of poultry, from which products were marketed:—

Year ended 30th June.	Number of Farms.	Stock at 30th June.		Eggs Produced. Thousand dozen.	Chickens Hatched For Sale as Day-Olds.	Poultry Consumed or Sold for Table Purposes. (Head.)
		Chickens under six months old.	Other Fowls.			
1929	2,124	300,547	1,099,558	10,637	658,268	596,000
1930	2,033	301,753	1,126,957	10,884	775,860	602,000
1931	2,106	349,849	1,207,068	11,583	1,104,048	654,000
*1932	2,323	204,069	1,401,957	12,822	1,190,451	759,000
*1933	2,507	232,507	1,536,981	14,066	1,383,732	1,039,472
*1934	2,598	209,505	1,760,739	15,544	1,423,428	1,099,539
*1935	3,474	258,217	2,063,398	18,517	1,278,337	1,248,207
*1936	3,296	181,464	2,083,070	19,065	1,537,671	1,109,272

\* Year ended 31st March.

Assuming that the mean of the number of stock over six months old at the beginning and end of the year represents approximately the number of laying stock in respective years (with some deduction for male stock), it would appear that the average egg production is in the vicinity of ten dozens per hen per year.

Returns received from commercial poultry farms disclosed that 1,109,272 head of poultry were consumed or sold for consumption during 1935-36. Reference to the foregoing table indicates a twofold increase in the production of table birds in commercial poultry farms since 1929.

#### Price of Eggs.

The average monthly wholesale prices of new-laid hen eggs per dozen in Sydney since January, 1929, are shown in the following table, together with the average price in each year weighted in accordance with the seasonal expectation of laying:—

Month.	Weight.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
		d.	d.	d.	d.	d.	d.	d.	d.
January ...	13	19	19·2	14·8	12·8	13·8	12·0	12·0	14·8
February ...	11	24	20·9	16·9	14·0	16·0	14·2	12·6	17·0
March ...	7	25	24·5	15·4	16·6	16·2	16·4	14·8	19·1
April ...	6	30	29·4	22·2	20·0	22·1	18·8	19·8	20·6
May ...	4	33	30·0	24·0	22·4	20·1	20·2	20·8	21·0
June ...	6	29	27·2	22·6	19·0	18·2	17·5	18·4	18·0
July ...	10	22	19·3	16·0	15·2	15·9	14·9	15·7	16·8
August ...	16	18	14·6	12·5	13·0	12·8	13·1	13·3	14·0
September ...	19	16	14·0	12·0	12·0	10·7	12·0	12·0	14·0
October ...	19	16	13·1	12·0	12·0	8·6	12·0	12·0	14·0
November ...	17	16	13·6	12·0	12·0	8·7	12·0	12·0	15·0
December ...	16	18	16·9	14·4	12·9	10·1	12·0	12·6	15·0
Estimated weighted average price for year ...	144	19·8	17·7	14·6	13·8	12·7	13·5	13·5	15·6

The monthly averages are unweighted and represent the mean of the daily quotes. Prices are quoted also for medium and pullet eggs, but these are not included above.

### *Egg Marketing Board.*

The Egg Marketing Board was constituted in terms of the Marketing of Primary Products Act after a poll of producers taken in September, 1928. The Board, which consists of three members elected by producers and two nominated by the Government, commenced operations in May, 1929, for the formation of a compulsory marketing pool. Polls of producers were taken also in 1931 and 1934, and on both occasions a large majority of the votes was in favour of this system of marketing.

In 1933 the Board's mandatory powers were suspended in view of a possibility of conflict with the constitutional powers of the Commonwealth in relation to interstate trade. Pending an alteration in the law, the Board functioned as a voluntary organisation of producers in administering the 1933-34 pool. Amendments to the Marketing Act were passed and the compulsory pool was commenced again in August, 1934.

The area of the Board's jurisdiction embraces the counties of Cumberland and Northumberland and the shires of Nattai and Wollondilly. All persons having more than 20 head of female fowls of productive age within this area are required to consign the eggs to the Egg Marketing Board, unless permitted by the Board, under contract, to sell their eggs privately.

A summary relating to recent pools is shown below:—

Pool Year.	Eggs under Board's Administration.			Realisations by Board.				
	Sold by exempt Producers.	Handled by Board.	Total.	Local Sales.		Exports.		
				Quantity.	Average per dozen.	Quantity.	Average per dozen net. (a)	Cost of Export per dozen.
		Thousand dozens.		doz.	d.	doz.	d.	d.
1931-32 ...	6,208	9,478	15,686	5,688,406	12.55	3,789,906	13.56	6.06
1932-33 ...	5,551	10,795	16,346	5,077,964	13.52	5,717,282	12.52	5.49
1933-34 ...	...	11,933	11,933	7,032,955	11.70	4,900,050	11.84	5.13
1934-35 ...	5,311	14,744	20,055	7,862,317	12.75	6,881,820	11.15	4.95
1935-36 ...	6,250	14,506	20,756	9,734,977	13.72	4,770,690	13.32	4.83
1936-37 ...	5,893	15,148	21,041	10,048,240	15.22	5,100,000	12.21	4.54

(a) Sydney basis—including exchange premiums.

Local sales by the Board in 1936-37 realised £637,208 and were effected at an average price of 15.22d. per dozen, compared with £556,501 and 13.72d. per dozen in 1935-36. These included eggs of all grades, whereas only first-grade eggs were exported.

Export sales in 1936-37 realised £355,929 or 16.75d. per dozen, of which £96,379, or 4.54d. per dozen, represented cost of packing material, transporting, insurance, etc., and producers were paid £302,858 or 14.25d. per dozen in respect of eggs exported. Particulars for 1935-36 were:—Export sales, £360,728 or 18.15d. per dozen; marketing costs, £95,920 or 4.83d. per dozen; and return to producers, £244,013 or 12.28d. per dozen.

In 1936-37 the Board handled 15,148,240 dozen eggs of all grades, compared with 14,505,667 dozen in 1935-36, and producers received £961,457 or an average of 15.23d. per dozen in 1936-37, and £831,314, equal to 13.75d. per dozen in 1935-36.

The average paid to producers for all eggs received by the Board (subject to pool deduction) was 15.06d. per dozen in 1930-31, 13.61d. in 1931-32, 12.15d. in 1932-33, 12.65d. in 1933-34, 12.75d. in 1934-35, 13.75d. in 1935-36 and 15.23d. in 1936-37.

Consignors to the Board contributed to the 1936-37 pool at the rate of 1d. per dozen and 5 per cent. on gross advance to 31st January, 1937, and thereafter to 5th June, 1937, at the rate of 1½d. per dozen and 5 per cent. on gross advance. Producer agency contributions during the 1936-37 pool were at the rate of 1d. per dozen to 31st January, 1937, and thereafter 1½d. per dozen to 5th June, 1937.

### *Oversea and Interstate Trade.*

The production of eggs in New South Wales (and in the Commonwealth as a whole) is in excess of requirements for home consumption, and substantial quantities are exported. The United Kingdom is the only important oversea market. Eggs from Australia are shipped on consignment, and thus the returns secured are governed by the state of the market at the time of sale.

The egg export season is confined to the latter half of the calendar year, arrivals in the United Kingdom usually extending from September to January, though at times shipments arrive as early as August and as late as February and March. These months are those of winter in the Northern Hemisphere when supplies in the United Kingdom are seasonably small. Prices in London are then about twice as high as in the spring and summer months (March to June). Rarely, however, does the net return on Australian eggs marketed in the United Kingdom exceed about 1s. per dozen (Australian currency). Moreover, even that modest return is not assured. For instance, in 1936-37 restrictions upon the import of eggs into Germany late in 1936 diverted large quantities of eggs from Continental sources to the British market, causing over-supply, and as a result, the collapse of sterling prices for Australian eggs from (for 16 lb. packs) 15.8d. per dozen in November, 1936, to 9.4d. per dozen in January, 1937.

Prices obtained for Australian eggs in London in recent seasons are shown in the appended table:—

Month.	Australian Eggs—Prices in London. Per Great Hundred (10 dozen)—Sterling.							
	15-lb. Pack.				16-lb. Pack.			
	1933-34.	1934-35.	1935-36.	1936-37.	1933-34.	1934-35.	1935-36.	1936-37.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
October ...	11 1	11 6	12 5	12 11	11 7	12 0	12 10	13 4
November	12 0	11 11	12 0	12 9	12 7	12 5	12 2	13 2
December	12 4	11 6	12 4	9 8	12 9	12 0	13 0	11 7
January ...	10 7	8 8	12 7	7 2	11 3	9 3	13 0	7 10

On eggs from foreign countries the British tariff (imposed in 1932) is 1s., 1s. 6d., and 1s. 9d. per great hundred (10 doz.) for packs up to 14 lb., from 14 lb. to 17 lb., and of over 17 lb., respectively. No duty is payable on eggs imported from British countries (except the Irish Free State), but the extent of this preference has had little effect in improving marketing opportunities for Empire producers. Unless measures are devised to prevent sudden heavy arrivals from Continental sources it would appear that the unsatisfactory marketing features of last season may be repeated at any time in the future.

The following table shows the recent trend of the oversea export trade in poultry and eggs:—

Year ended 30th June.	Eggs in Shell.		Frozen Poultry.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	doz.	£	pairs.	£	£
1927	1,839,046	137,808	18,892	29,681	167,489
1928	447,996	34,660	6,453	7,600	42,260
1929	858,795	66,893	8,050	11,971	78,864
1930	1,627,367	123,443	11,445	15,545	138,988
1931	2,388,126	139,782	5,312	5,022	144,804
1932	3,627,853	191,140	23,676	25,986	217,126
1933	6,297,211	372,254	36,813	28,233	400,487
1934	5,689,526	308,254	17,493	9,555	317,809
1935	6,843,489	356,292	14,675	9,363	365,655
1936	5,137,424	263,595	25,763	21,447	285,042
1937	5,429,732	322,082	25,433	23,598	345,680

Particulars as to the interstate imports of eggs into Sydney by rail and by sea are collected by the Director of Marketing, and a summary of these is provided below in respect of the years ended 30th June, 1935 to 1937.

State Whence Imported.	1934-35.		1935-36.		1936-37.	
	In Shell.	Pulp.	In Shell.	Pulp.	In Shell.	Pulp.
	doz.	cwt.	doz.	cwt.	doz.	cwt.
Victoria ...	371,910	3,453	126,300	1,907	380,760	1,325
Queensland ...	370,350	339	431,970	...	247,020	...
South Australia ...	824,670	11,007	647,310	12,423	340,610	11,801
Western Australia ...	...	...	...	...	...	29
Total ...	1,566,930	14,799	1,205,580	14,330	968,390	13,155

One cwt. of egg pulp is equivalent to approximately 93½ dozen eggs.

#### BEE-KEEPING.

The bee-keeping industry is of minor importance, and is conducted generally as an adjunct to other rural occupations. Good table honey is obtained from the flora of native eucalypts of many varieties.

The industry is subject to regulation in terms of the *Apiaries Act* in order to prevent the spread of disease amongst bees. Frame hives must be used and bees may not be hived otherwise.

From 1st November, 1929, to 31st August, 1932, honey was marketed by a board in terms of the Marketing of Primary Products Act. The arrangement was terminated as a result of a poll of apiarists.

Statistics collected under the Census Act which are published below represent, in the main, the extent of bee-keeping on holdings of one acre and upwards, but hives are maintained on smaller areas, from which information is not collected. The records, therefore, are incomplete.

In 1935-36 returns were obtained from 2,912 holdings on which bee hives were kept. The particulars recorded in each of the last eleven years are shown below:—

Season.	Bee Hives.			Honey.	Average Yield of Honey per Productive Hive.	Beeswax.
	Productive.	Un-productive.	Total.			
	No.	No.	No.	lb.	lb.	lb.
1925-26	36,901	4,527	41,428	2,235,095	60·6	38,271
1926-27	31,310	7,732	39,042	1,522,540	48·6	22,636
1927-28	26,009	11,090	37,105	1,154,201	44·4	17,139
1928-29	32,444	8,711	41,155	2,354,845	72·6	30,064
1929-30	32,420	10,860	43,280	2,101,619	64·8	35,493
1930-31	36,800	8,585	45,385	2,643,871	71·8	36,460
1931-32	38,089	11,251	49,350	2,123,233	55·7	27,933
1932-33	46,523	13,442	59,965	2,021,242	62·8	38,715
1933-34	36,552	19,204	55,756	1,397,426	38·2	27,069
1934-35	67,170	15,193	82,363	5,539,677	82·5	70,564
1935-36	76,481	19,875	96,356	4,577,097	59·8	62,886

The yield per productive hive is subject to marked fluctuations according to seasonal conditions, and these were exceptionally favourable in 1934-35, when more honey was produced than in any previous year.

It is not known to what extent the sharp increase in the number of hives recorded in 1935 and 1936 may signify actual change in the status of the industry.

The estimated value of the recorded production from bees was £95,000 in 1934-35 and £68,000 in 1935-36, the quantity of honey and beeswax produced in each division in those years being as follows:—

Division.	1934-35.		1935-36.	
	Honey.	Beeswax.	Honey.	Beeswax.
	lb.	lb.	lb.	lb.
Coastal ... ..	1,239,247	19,246	1,049,558	19,424
Tableland ... ..	3,204,157	35,271	2,766,244	31,733
Western Slopes ... ..	1,008,031	14,418	639,607	10,872
Central Plains, Riverina, and Western Division.	88,242	1,629	121,688	857
Total ... ..	5,539,677	70,564	4,577,097	62,886

## VALUE OF DAIRY AND FARMYARD PRODUCTION.

It is evident from the foregoing that the dairying and farmyard industries are important factors in the rural production of New South Wales. The farm value of production in 1935-36 amounted to £14,112,000 or £5.6s. 3d. per head of population. The dairying industry yielded £9,528,000; pigs, £1,077,000; poultry, £3,439,000; and bees, £68,000. The farm value of production at intervals since 1911 was as follows:—

Year.	Milk for Butter.	Milk for Cheese.	Milk (not used for Butter or Cheese).	Stock Slaughtered.		Poultry and Eggs.	Bees.	Total.
				Milch Cows, etc.	Pigs.			
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
	£	£	£	£	£	£	£	£
1911	3,631	129	619	389	447	1,280	39	6,524
1911-16*	3,642	161	873	424	526	1,600	30	7,256
1916-21*	5,471	253	1,902	671	1,038	2,500	38	11,873
1921-26*	6,003	214	2,589	917	1,069	2,719	36	13,547
1926-31*	6,550	223	2,504	495	1,148	3,213	37	14,170
1932-36*	5,557	188	2,211	635	858	2,837	53	12,339
1928-29	6,822	228	2,658	571	1,237	2,999	44	14,559
1929-30	6,884	234	2,608	524	1,105	3,140	44	14,539
1930-31.	5,974	176	1,964	456	839	2,584	46	12,039
1931-32	5,821	182	1,887	276	730	2,595	34	11,525
1932-33	5,098	190	2,138	514	747	2,728	47	11,462
1933-34	5,221	199	2,206	641	821	2,603	22	11,713
1934-35	5,800	179	2,304	771	913	2,823	95	12,885
1935-36	5,846	188	2,521	973	1,077	3,439	68	14,112

\* Yearly average.

## PRICES OF FARMYARD PRODUCTS.

The average wholesale prices obtained in the Sydney markets for the principal kinds of dairy and poultry farm produce in 1929 and each of the last six years are shown in the following table. The average quoted for the year represents the mean of the prices ruling each month, and does not take into account the quantity sold during the month.

Dairy and Poultry Farm Produce.	1929.	1931.	1932.	1933.	1934.	1935.	1936.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Milk ... ..gal.	1 8½	1 7½	1 5½	1 5	1 5	1 5	1 5
Butter ... ..lb.	1 9½	1 4½	1 2½	1 1½	1 2½	1 3½	1 3
Cheese ... ..	0 11½	0 8½	0 8½	0 7½	0 7½	0 9½	0 9½
Bacon (sides) ... ..	1 1½	0 9½	0 9	0 8½	0 9½	0 9½	0 9½
Eggs (new laid) doz.	1 10½	1 4½	1 3½	1 2½	1 2½	1 2½	1 4½
Poultry—							
Fowls—							
(Cockerels) ...pr.	8 11	6 2	6 0	6 0	6 1	6 4	6 9
Ducks—							
(English) ... ..	8 4	4 7	*	*	*	10 7	*
Geese ... ..	11 2	8 6	6 10	6 11	8 0	7 2	7 5
Turkeys (cocks) ..	30 6	20 11	21 5	23 4	22 2	22 3	25 6
Bees produce—							
Honey ... ..lb.	0 4½	0 4	0 4½	0 3½	0 4½	0 3½	0 3½
Wax ... ..	1 9	1 3	1 1½	0 1½	1 6½	1 7	1 5

\* No quotations.

The relative variations in the Sydney wholesale prices of eight principal dairy and farmyard products, viz., butter, cheese, bacon, ham, eggs, condensed milk, honey and lard are shown in the following table of index numbers, in which the prices of 1911 are taken as the base and represented by 1,000:—

Year.	Index Number.	Year.	Index Number.	Year.	Index Number.
1901	963	1927	1,831	1933	1,172
1906	953	1928	1,763	1934	1,245
1911	1,000	1929	1,842	1935	1,292
1916	1,380	1930	1,571	1936	1,316
1921	2,020	1931	1,386		
1926	1,760	1932	1,295		

A steady decline caused the index number to fall by 36 per cent. between 1929 and 1933. Between January, 1934, and June, 1937, the index numbers indicated an improvement in price in these products of nearly 30 per cent., but even then prices were still more than 20 per cent. below the average for the year 1929.

A comparative table showing the relative increases in the wholesale prices of eight groups of commodities is published in the chapter "Food and Prices" of this Year Book.

#### FUR-BEARING RABBITS.

In 1929 sanction was given for the keeping of fur-bearing rabbits in captivity within the counties of Cumberland and Camden in terms of the Pastures Protection Act. In June, 1931, there were licenses current covering rabbits numbering 20,310, but thereafter the industry rapidly declined and is now of little importance.

## FORESTRY.

### *The Forest Estate.*

THE forest lands of the State containing timber of commercial value consist of about 11 million acres, of which about 8 million acres are Crown lands. Over 6½ million acres of the State lands are either dedicated or reserved for the preservation and growth of timber.

The total forest area, although not large, contains a great variety of useful timbers, which in hardwoods number about twenty different kinds of good commercial value, including such renowned constructional woods as ironbark, tallow-wood, and turpentine. In other timbers there are about twenty-five commercial varieties, including such valuable timbers as cedar, beech, pine, and teak. It is estimated that, approximately, five-sixths of the timber supply consists of mixed hardwoods and one-sixth of soft and brush woods.

An account of the system of forestry administration in New South Wales was published on pages 669 and 670 of the Year Book for 1928-29. The Forestry Act was amended in 1935 to make provision for the permanent dedication of reserves for the preservation of natural flora, for the protection of water supply catchment areas, and for the prevention of erosion.

### *State Forests.*

Provision was made by the Forestry (Amendment) Act, 1935, for areas suitable for permanent devotion to forestry purposes to be declared as National forests. The dedication of an area as a National forest may be revoked only by specific Act of Parliament. Land dedicated as a State forest may be withdrawn from forestry purposes by a resolution of both Houses of Parliament. Timber reserves are usually temporary reservations, revocable by executive act, protecting forest lands pending removal of timber, examination as to suitability for permanent dedication, or disposal of the lands for settlement or other public purposes.

As at 30th June, 1937, a total area of 5,131,296 acres of Crown lands had been dedicated permanently including 4,442,952 acres as State forests and 688,344 acres as National forests and 1,429,809 acres had been set apart tentatively as timber reserves. Included in the State forests are a number of State forest plantations of an aggregate area of 44,522 acres.

Particulars relating to the State forests and plantations and timber reserves as at the end of each of the last seven years are shown below:—

At 31st December.	State Forests.		State Plantations.	Timber Reserves.	
	Number.	Area.	Area.	Number.	Area.
		acres.	acres.		acres.
1931	724	5,152,462	27,300	592	1,523,715
1932	719	5,131,046	32,018	583	1,484,867
1933	721	5,128,305	36,026	577	1,420,082
1934	718	5,115,080	38,683	570	1,387,537
1935	720	5,144,630	42,687	572	1,429,832
1936*	720	5,147,477	43,966	564	1,410,032
1937*	718	5,131,296†	44,522	572	1,429,809

\* 30th June.

† Including 688,344 acres of National forests.

*Location of Forest Lands and Main Forest Types.*

A description of the timber zones of New South Wales and of the principal types of timber to be found in them was published on pages 671 and 672 of the Year Book for 1928-29.

*Forest Management.*

Development and protection of the indigenous forests is the dominant feature of forest policy. Intensive management surveys are being undertaken to ascertain the economic and silvicultural potentialities of the forests, and as the surveys are completed a working plan providing a detailed written scheme of management for each area is laid down. To facilitate forest development and management, and the economic exploitation of the timber wealth, the Forestry Commission is pursuing a programme of road construction where necessary to afford access to and within the State forests.

In recent years there has been considerable activity in the establishment of exotic coniferous plantations; but in view of the requirement of the Forestry (Amendment) Act, 1935, that "no scheme of afforestation with exotic species of timber shall be undertaken or extended. . . except with the written approval of the Minister, which approval shall not be given . . . unless the soil, site and climate are such as to render the carrying out of the scheme desirable in the interests of the public," the planting of additional areas has ceased. Site quality surveys are proceeding to determine where, and to what extent, further coniferous planting is justified.

The expenditure of funds from Commonwealth and State unemployment relief grants has enabled a great deal of forest improvement work to be carried out in the last few years.

*Production and Consumption of Timber.*

The following summary shows the number of timber mills in operation, the number of employees working therein (exclusive of carters etc.), and the output of sawn timber in each of the past eight years:—

Year ended 30th June.	Mills Operated.	Average Number of Persons Employed whole year.	Output of Sawn Timber.					
			Native.		Imported.		Total.	Value.
			Soft- wood.	Hard- wood.	Soft- wood.	Hard- wood.		
	No.	No.	Thousand super feet.					£000
1929	477	3,982	41,637	94,414	3,197	282	139,530	1,750
1930	433	3,250	37,464	81,556	5,941	...	124,961	1,522
1931	372	1,738	15,119	41,413	2,042	...	58,574	670
1932	349	1,486	17,851	34,251	3,993	...	56,095	577
1933	373	2,176	29,158	42,754	5,564	...	77,476	754
1934	408	2,811	35,634	55,398	24,092	46	115,170	1,112
1935	447	3,687	44,740	77,865	49,689	...	172,294	1,829
1936	440	4,289	45,536	87,805	57,960	...	191,301	2,021

The output of sawn timber was already declining when activity in the industry was severely affected by the general depression, causing a decrease from 139,500,000 super. feet in 1928-29 to 56,100,000 super. feet in 1931-32. Then conditions began to improve, and the output of native timbers has risen from 52,100,000 super. feet in 1931-32 to 133,340,000 super. feet in 1935-36, and there was a remarkable increase in imported softwoods as a result of the importation of a large quantity of logs from Canada.

The following table shows the annual gross consumption of native and imported timbers as estimated by the Forestry Commission for successive years since 1925:—

Year ended 31st December.	Estimated Gross Consumption of Timber.					
	Native.				Imported from Overseas.	Grand Total.
	Softwood.	Hardwood.	Fuel.	Total Native.		
	(000 omitted.)					
	cubic feet.	cubic feet.	cubic feet.	cubic feet.	cubic feet.	cubic feet.
1925-29*	7,120	20,392	13,023	40,535	17,040	57,575
1930†	3,735	14,755	11,226	29,716	7,880	37,596
1931†	2,320	9,798	10,624	22,742	3,495	26,237
1932	4,172	12,636	12,185	28,993	5,938	34,931
1933	4,891	17,214	13,130	35,235	8,571	43,806
1934	6,965	25,452	13,399	45,816	11,352	57,168
1935	9,750	24,478	14,935	49,163	16,121	65,284
1936†	3,962	14,454	8,050	26,466		

\* Yearly average, years ended 30th June.

† Years ended 30th June.

‡ Six months ended 30th June.

The consumption of native timbers, as estimated for the year 1935, was two and a half times the estimate for the year 1931, and greater than in any previous year of record. The increase over 1931 was relatively greater in the case of imported timbers, but the consumption of such timber was below that of the pre-depression years. The quantity of native timber other than fuel used in 1935 was never previously exceeded.

#### *Value of Production from Forestry.*

The following table shows the value of forestry production as at the place of production in New South Wales at intervals since the year 1901:—

Year ended 30th June.	Value.	Year ended 30th June.	Value.
	£		£
1901*	554,000	1931	1,131,000
1906*	1,008,000	1932	1,158,000
1911*	998,000	1933	1,476,000
1916	1,045,000	1934	1,737,000
1921	1,656,000	1935	1,922,000
1926	1,885,000	1936	2,014,000

\* Year ended 31st December.

#### *Imports and Exports of Timber.*

The greater part of the softwood used in New South Wales has been drawn for many years from foreign sources of supply, among which New Zealand, the United States of America, Canada, Norway, and Sweden are most important. The position with regard to the planting of softwoods in New South Wales is indicated at a preceding page.

In the following table particulars are shown regarding the import and export of timber to and from New South Wales at intervals since 1901. The large import reflects a demand for softwoods. It is not probable that

the export trade will assume large proportions, though the forests of the State abound in high-class hardwoods. Most of the timber exported is in the form of sleepers and piles.

Year.	Imports Oversea to New South Wales.				Exports of Australian Produce Oversea from New South Wales.			
	Undressed.		Other.	Total Value.	Undressed.		Other.	Total Value.
	Quantity.	Value.			Quantity.	Value.		
	sup. feet. (000)	£	£	£	sup. feet. (000)	£	£	£
1901	68,369	322,642	137,123	459,765	10,386	66,346	58,664	125,010
1906	84,772	444,563	81,850	526,413	29,322	325,805	9,301	335,166
1911	164,380	955,344	209,028	1,164,372	28,398	250,990	17,949	268,939
1915-16	119,232	814,102	74,305	888,407	15,099	144,486	10,965	155,451
1920-21	93,303	1,904,064	174,910	2,078,974	23,202	447,653	17,072	464,725
1925-26	194,393	1,964,596	463,610	2,428,206	23,486	390,439	6,689	397,128
1928-29	187,009	1,919,846	301,343	2,221,189	13,989	241,504	7,408	248,912
1929-30	177,635	1,718,015	179,639	1,897,654	15,898	270,019	8,440	278,459
1930-31	47,825	204,029	14,428	308,457	16,384	228,561	13,431	241,992
1931-32	54,489	300,642	17,399	318,041	11,371	129,897	1,689	131,586
1932-33	79,987	383,632	24,490	408,122	8,437	100,629	4,345	104,974
1933-34	125,628	491,271	24,682	515,953	13,141	153,851	2,724	156,575
1934-35	165,999	682,284	33,855	716,139	29,815	313,401	3,722	317,123
1935-36	190,578	665,696	36,926	702,622	22,599	293,433	2,703	296,136
1936-37	187,924	674,060	39,942	714,002	27,351	395,725	3,859	399,584

In addition there is a considerable interstate movement of timber by sea, of which complete records are not available. The quantity of rough and sawn timber recorded by the Sydney Harbour Trust as being imported at Sydney from other Australian States was 10,116,961 super. feet in 1928-29, 3,245,000 super. feet in 1930-31, 20,184,574 super. feet in 1935-36, and 22,329,333 super. feet in 1936-37.

### Forestry Licenses and Permits.

Licenses and permits are granted for the purposes of obtaining timber and fuel, grazing, sawmilling, ringbarking, and for the occupation of forest land. The fees for licenses and permits are small, but considerable revenue is gained from royalties on timber, and rents for occupation permits, etc.

The revenue collected by the State from timber licenses, rents, and from royalty on timber during various years since 1911 is shown in the following table:—

Year ended 31st Dec.	Sales, Rents, Fees, etc.	Royalty on Timber.	Total.	Year ended 31st Dec.	Sales, Rents, Fees, etc.	Royalty on Timber.	Total.
£	£	£	£	£	£	£	£
1911	11,153	79,165	90,318	1933	38,841	100,370	139,211
1916*	8,701	59,406	68,107	1934	42,017	123,997	166,014
1921*	76,141	114,601	190,742	1935	45,568	142,903	188,471
1926*	42,984	181,223	224,207	1936†	16,865	70,809	87,674
1931	35,742	52,806	88,548	1937*	45,643	161,127	206,770
1932	32,832	71,842	104,674				

\* Year ended 30th June.

† Six months ended 30th June.

Included in the total for the year ended 30th June, 1937, are sales of converted and confiscated material £13,125, and rents for occupation permits, forest leases, etc., £21,043.

The experience of Europe and America indicates that well-directed expenditure by the Government in afforestation and re-afforestation is directly reproductive, and forest improvement in New South Wales, where timber grows more rapidly and to larger size, has been shown to produce very favourable results.

Particulars of the expenditure by the Forestry Commission during the five years ended 31st December, 1935, were shown at page 557 of the Official Year Book, 1934-35. The total expenditure in each of those years, with the amount expended on unemployment relief work shown in parenthesis was £124,262 (£3,253) in 1931, £114,151 (£7,782) in 1932, £132,814 (£25,109) in 1933, £213,067 (£106,370) in 1934, and £349,119 (£235,734) in 1935.

The expenditure, as classified since 1st January, 1935, is shown below:—

Head of Expenditure.	January, 1935, to June, 1936.	Year ended June, 1937.
	£	£
Salaries and payments in the nature of salary .....	61,541	49,611
Maintenance and working expenses .....	33,538	22,867
Other services .....	1,389	1,583
Survey and organisation of State forests and regeneration .....	90,269	82,941
Unemployment Relief—State .....	315,090	155,599
„ Commonwealth .....	19,679	23,882
Total.....	521,506	336,483

The moneys for the relief of unemployment have been expended for the most part in afforestation and work for the improvement and protection of the forests.

#### *Persons Employed in Timber Industry.*

It has been estimated by the Forestry Commission that 12,574 persons were employed in the timber industry during the eighteen months ended 30th June, 1937, viz., 3,232 in felling and cutting; 2,176 in hauling timber to the mills; 3,568 in milling; and 3,598 in other occupations. These figures include persons partially employed, viz., 1,666 in felling and cutting, and 907 in hauling timber.

## FISHERIES.

A BRIEF statement of the nature of the fisheries of New South Wales was published on page 676 of the Year Book for 1928-29. In September, 1936, the Commonwealth Government appointed an eminent authority as Federal Officer in Charge of Fisheries Investigations, with the object of ascertaining the possibilities of extending the fishing industry in Australia. The Commonwealth Council for Scientific and Industrial Research is engaged in exploring the resources of fish in Australian waters, and a special research vessel now being built for employment in that work is expected to be placed in commission early in 1938.

### *Control of the Fisheries.*

The law relating to fisheries in New South Wales was consolidated and amplified by the Fisheries and Oyster Farms Act, 1935, which came into operation on 16th November, 1936. The general administration of the Act is vested in a Minister of the Crown (the Chief Secretary) who has the duty of protecting, developing and regulating the fisheries of the State within its territorial limits. Fisheries in Australian waters beyond territorial limits are within the legislative province of the Commonwealth. To give effect to the Convention for the Regulation of Whaling signed at Geneva on 4th September, 1931, the Federal Parliament enacted the Whaling Act, 1935, which governs operations in Australian waters beyond territorial limits by all ships over which the Commonwealth has jurisdiction. At one time the whaling industry gave promise of attaining considerable importance, but in recent years operations conducted from New South Wales have been negligible.

For administrative purposes and to enforce the law, inspectors may be appointed under the Fisheries Act, and all members of the police force may exercise all the powers and duties of an inspector. Honorary vigilance committees, each of not more than twelve members may be appointed for terms of five years, each member of which may be authorised to exercise such inspectorial powers as may be conferred by the regulations. Control is secured by authority to close waters to the taking of fish, either wholly, as to a certain season, or in respect of prescribed species or sizes of fish; the licensing of fishing boats and fishermen operating for pecuniary gain; regulation of the use of nets; prohibition of the use of explosives in, and in certain cases other methods of, the taking or capture of fish; provisions governing the consignment and sale of fish, including the licensing of fish agents and salesmen; and, power to require returns to be furnished disclosing the nature and extent of fishing operations.

The Minister may institute experiments and have research undertaken in the interests of the fisheries, related to methods of taking and marketing fish. For the purpose of promoting the stocking of waters with trout and salmon, acclimatisation districts may be declared, in respect of which acclimatisation societies may be registered and given the power to exercise control over and the management of fisheries therein. The Act fixes a close season for trout from 1st May to 30th September of each year (which may be varied by proclamation); prohibits the taking of trout or salmon except pursuant to a license, saving in the case of the occupier of the land containing the waters, and also regulates the manner of trout fishing.

*Licenses.*

The number of licenses granted to fishermen during the year 1936 was 2,591, and licenses were issued in respect of 1,531 boats. Licenses were issued in that year to 26 fish agents; oyster vendors' licenses numbered 324, and 37 salesmen's endorsements were also made. Fees payable are at the rate of 5s. each for fishermen's and boat licenses, and £1 each for fish agents' and oyster vendors' licenses, reduced by one-half where licenses are issued after 30th June. The fee for a salesman's endorsement is 10s.

*Oyster Farms and Oyster Leases.*

Oyster culture has developed into an industry of some importance, and in 1935-36 there were 4,436 leases in existence, embracing a length of foreshore of 917,541 yards, and off-shore areas totalling 2,991 acres, while 617 persons were engaged in the industry.

Under the Fisheries and Oyster Farms Act, 1935, the available areas are classified as special, average or inferior lands according to productive capacity. Leases of special lands may be granted for a term of fifteen years, and are eligible for renewal for a similar term. Initially such leases are offered by public auction or public tender at a rental determined by the Minister. The rent of average lands, which may also be leased for a term of fifteen years, and are eligible for renewal for a like term, is as fixed by the Minister. Inferior lands may be leased for a ten years' period, and cannot be exploited in the first year of the lease. Rental for leases of inferior lands is also fixed by the Minister. In the last year of the lease the area may be reclassified; if determined as average lands, a renewal for fifteen years may be obtained; if the classification is unaltered the lease will be eligible for renewal for ten years.

In all cases rental as determined by the Minister is subject to reference, either on the application of an applicant or by the Minister, to the local land board, the determination of which is final and conclusive.

The discoverer of a natural oyster bed has a statutory prior right to a lease of the area, unless it be classified as special lands.

Preferment rights to apply for renewal of leases of inferior or average lands and for additional similarly classified lands is conferred upon existing lessees, but must be exercised within thirty days of the right arising. But applicants other than lessees, and lessees whose areas are deemed inadequate have a preferment right to an area as against other applicants with adequate lands, saving as regards lessees eligible for renewal of leases, or for securing areas immediately adjoining the off-shore boundary of leases having frontage to high-water mark.

Lessees must keep the leased areas free from disease, and leased areas may be closed when over-dredged, subject to disease, or for other reason which in the Minister's opinion warrants such a course.

Public oyster reserves may be notified, and such areas are open to the public for the taking of oysters for their own immediate consumption, unless specifically declared closed.

During the year 1936 applications for oyster leases numbered 439, representing 64,839 yards of foreshore and 636 acres of off-shore leases.

*PRODUCTION FROM FISHERIES.*

The most important kinds of fish marketed are flathead, snapper, bream, blackfish, whiting, mullet, jewfish, garfish, and Murray cod—a freshwater fish; tailer, trevally, and leather-jacket are readily saleable.

The production of fish, oysters and prawns as recorded in each year since 1927 is shown in the following table. The figures relate to commercial enterprises only:—

Calendar Year.	Fish.			Oysters.	Prawns.
	Trawled.	Captured Otherwise.	Total.		
	lb.	lb.	lb.	bags.*	lb.
1927 ... ..	11,830,330	12,755,942	24,586,272	30,303	1,083,324
1928 ... ..	13,406,820	13,865,165	27,261,985	29,180	1,671,186
1929 ... ..	17,125,760	13,519,308	30,645,068	31,965	1,119,044
1930 ... ..	18,311,620	9,957,611	28,269,231	25,472	1,393,106
1931 ... ..	13,067,922	10,711,630	23,779,552	22,066	1,537,420
1932 ... ..	11,740,708	11,296,307	23,037,015	27,643	1,534,100
1933 ... ..	11,110,280	11,467,850	22,578,130	28,477	1,293,497
1934 ... ..	10,304,160	11,597,677	21,901,837	27,113	1,483,803
1935 ... ..	10,794,484	12,871,548	23,666,032	29,587	1,741,080
1936 ... ..	13,834,170	12,683,210	26,517,380	35,480	1,563,555

\* 3 bushels.

Most of the recorded production is marketed in the metropolitan and Newcastle districts. In 1936 more than half the supply was obtained by deep sea trawling. There was a rapid increase in the production of trawled fish between 1926 and 1930, and a marked decline in 1931. In the next three years the decline continued at a slow rate, but was reversed slightly in 1935, and more significantly in 1936. During 1936 there were 14 trawlers in commission, as compared with 18 in 1929. Production by inshore fishermen declined by 28 per cent. between 1928 and 1930, but increased slowly during the next five years. There was again a slight decline in 1936.

*Fish.*—The bulk of the inshore supplies is obtained in the estuaries and lakes on the northern part of the coast-line. The approximate quantities of fresh fish marketed in Sydney and Newcastle from each of the principal fishing grounds of the State are indicated below:—

	1936. lb.		1936. lb.
Wallis Lake and Manning River ... ..	1,888,363	Port Jackson and Parramatta River ... ..	205,620
Clarence River ... ..	1,615,921	Port Hacking ... ..	131,220
Tuggerah Lakes and Terrigal Haven ... ..	731,615	Total—Metropolitan ... ..	1,165,310
Camden Haven ... ..	461,646	Shoalhaven and Crookhaven Rivers ... ..	396,211
Macleay River ... ..	280,350	Lake Illawarra ... ..	372,485
Port Stephens ... ..	247,380	St George's Basin and Sussex Inlet ... ..	333,555
Lake Macquarie ... ..	207,179	Jervis Bay ... ..	309,830
Other ... ..	552,976	Other ... ..	256,754
Total—North Coast ... ..	5,985,430	Total—South Coast ... ..	1,668,835
Hawkesbury River ... ..	520,907	Coastal—Undefined ... ..	83,836
Botany Bay & Georges River	307,563	Inland Waters ... ..	154,763
		Grand Total ... ..	9,058,174

In addition to the above 2,454,519 lb. of fish was sold locally at fishing centres, 601,475 lb. was consigned from the North Coast to Brisbane, and 464,856 went from the South Coast to Victoria.

*Crayfish.*—The number of marine crayfish (*Palinurus*) obtained during 1936 was 153,420. The number captured was very much greater, but many

were lost by death before marketing. The principal source of supply was the northern crayfish grounds, from Newcastle to Port Macquarie. From this district over 83,500 were sent to market.

*Prawns*.—A quantity of approximately 1,563,555 lb. of marine prawns (*Penaeus*) was obtained during 1936, and about 13,766 lb. were condemned.

*Crabs*.—About 1,650 dozens of crabs were obtained in 1936. The catch included several species of swimming crabs, notably the Blue (*Lupa*) and the Mangrove (*Scylla*).

*Oysters*.—During the year 1936 the oyster production of the State was the greatest on record, and amounted to 35,480 bags, each of 3 bushel capacity. These consisted of Rock oyster (*Ostrea cucullata*), and the output was principally the result of artificial cultivation.

#### Oversea Trade in Fish.

A considerable proportion of the local requirements of fish are imported from countries outside Australia. Fish so imported during the year ended June, 1937, was valued at £560,246 compared with £551,773 in 1935-36, including 13,778,784 lb. of tinned fish valued at £368,195 in 1936-37, and 13,336,443 lb. valued at £371,474 in 1935-36. The value of fish exported overseas, principally to New Guinea and the Islands, was £15,165, including tinned fish to the value of £13,400 in 1936-37. Corresponding figures for 1935-36 were £10,543 and £7,780. The fish exported is mainly non-Australian in origin.

#### Value of Fisheries Production.

The value of the production from fisheries of New South Wales, as recorded during the year ended 30th June, 1936, was approximately £583,000, including fresh fish, £474,000; oysters, crayfish, prawns, etc., £109,000.

The value of production is estimated as at the place of production and is exclusive of fish condemned, of fish sold in fishing and other centres (and not recorded), or used for fertiliser and oil, and of the value of molluscs other than oysters.

The following table shows the value of production from fisheries in various years since 1920-21:—

Year ended 30th June.	Value. (000 omitted.)	Year ended 30th June.	Value. (000 omitted.)
1921	£ 491	1932	£ 591
1926	553	1933	544
1929	775	1934	536
1930	788	1935	536
1931	635	1936	583

#### FISH PRESERVING.

Many fishes specially suitable for treatment by canning, smoking, or salting are obtainable in the waters along the coast of New South Wales, but irregularity of supplies and climatic disadvantages have militated against the success of canning factories.

#### FISH CULTURE AND ACCLIMATISATION.

Acclimatisation of trout has met with remarkable success in the State—trout up to 8 and 10 lb. are occasionally captured. Suitable streams, viz., practically all above an altitude of 2,500 feet, have been stocked with trout. The number released in 1936 was 665,000, as compared with 988,600 in 1935.

## RURAL SETTLEMENT.

A summary resume of the spread of settlement in New South Wales and of the development of the problem of rural settlement was published at page 679 of the Year Book for 1928-29.

The State Government has adopted a policy of closer settlement and more intensive farming in districts where the quality of the soil, generally adequate rainfall, and facilities of transport afford reasonable assurance of successful farming. In furtherance of that policy the voluntary subdivision of large estates is being encouraged, and steps are being taken for compulsory acquisition by resumption or otherwise of suitable areas for closer settlement in cases where subdivision appears warranted and is not effected voluntarily. New settlers of proved capacity and sufficient resources will be assisted financially, and in this way steady and soundly based rural development in keeping with the economic possibilities will be fostered. More detailed reference to the activities of the State in relation to closer settlement will be found at page 739 *et seq.* of this Year Book.

### RURAL HOLDINGS.

The land of New South Wales which is occupied in rural holdings consists either of alienated lands, lands in course of alienation, leased Crown lands, or various combinations of these tenures, while a considerable area remains as Crown reserves. At 31st March, 1936, the number of agricultural and pastoral holdings of 1 acre or more in extent was 75,631, including 1,273 unoccupied or not used for agricultural or pastoral purposes at that date, and 1,000 used only incidentally for such purposes. These holdings embraced a total area of 172,456,676 acres.

The area of land neither alienated nor leased from the Crown does not represent the area of unoccupied land available for settlement. It includes the land unfit for occupation of any kind—estimated to be approximately 5,000,000 acres in extent; land embraced in State forests and not otherwise occupied; unoccupied reserves for necessary public purposes, such as commons, travelling stock and water reserves, roadways, railway enclosures; and unoccupied land covered by water or too rugged or arid for occupation. Such lands are situated mainly in the coastal and tableland divisions, but smaller proportions are found in all divisions.

#### *Use of terms "Alienated Land" and "Holding."*

In collecting statistical returns relating to agricultural and pastoral holdings, the term "alienated land" is intended to relate to lands absolutely alienated, lands in course of alienation, homestead selections and homestead farms and certain perpetual irrigation tenures embraced within rural holdings one acre or more in extent. These tenures include practically the whole of the land alienated and virtually alienated. The term "alienated land" used throughout this chapter refers to the area so returned by individual landholders, and it does not, therefore, correspond to lands absolutely alienated for which deeds of purchase have been issued. This area has been shown as land absolutely alienated in the chapter entitled "Land Legislation and Settlement," which follows.

The term "holding" as used in this section and the sections dealing with rural industries signifies, in general and unless the context otherwise requires, an area of land worked as an individual unit. In some cases, two or more such "holdings" are in the same ownership, but usually where contiguous or closely neighbouring "holdings" are within the same ownership and are worked virtually as one they are classified as one holding.

*Purposes for which Holdings are Used.*

The problem of rural development in New South Wales relates largely to the task of placing additional permanent settlers on the land as productive units of the population. In addition to human factors, this problem is complicated by the variations of seasons and of markets, which determine largely the profitability of rural pursuits. An approximate classification of the main purposes for which rural holdings of one acre and upwards were used is available for each year since 1908, and provides the following comparison, which shows at intervals the distribution of rural settlement according to purposes:—

Main purpose for which holdings are used.	Number of Holdings.							
	1908.	1911-12.	1925-26.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Agriculture only ... ..	7,244	6,814	11,435	10,986	11,283	11,352	10,689	10,293
Dairying only ... ..	3,575	3,157	9,766	15,136	15,177	15,033	14,929	14,989
Grazing only ... ..	21,874	22,011	25,428	23,244	21,669	21,692	22,112	21,970
Agriculture and Dairying ...	8,377	8,258	5,624	3,406	4,101	4,315	4,226	4,066
Agriculture and Grazing ...	18,733	21,969	18,084	14,825	15,597	15,438	15,373	15,995
Dairying and Grazing ...	1,818	2,099	1,794	1,480	1,475	1,498	1,474	1,445
Agriculture, Dairying, and Grazing... ..	3,312	4,362	1,734	1,614	2,102	2,065	1,962	1,834
Poultry, Pig, or Bee Farming ... ..	529	879	1,526	1,748	1,827	1,846	2,776	2,786
<b>Total Holdings of one acre and upwards used mainly for Agricultural and Pastoral purposes</b>	<b>65,462</b>	<b>69,549</b>	<b>75,391</b>	<b>72,439</b>	<b>73,231</b>	<b>73,239</b>	<b>73,531</b>	<b>73,358</b>

NOTE—The basis of classification was amended in 1928-29.

In addition to the above, a considerable number of small holdings—usually less than 30 acres in extent—were used partly for agricultural and pastoral purposes, but mainly for residential and other purposes, or were unoccupied at the time of collecting the returns. The above table does not indicate the actual number of settlers occupying the land—because some holdings are held conjointly, and a number of landholders own more than one holding.

In 1928-29 the basis of classification was amended so that holdings, on which agricultural operations were entirely or almost entirely confined to the raising of produce to feed sheep, cattle or pigs on the holding, were classified under the headings "grazing only" or "dairying only." Poultry, pig, and bee farming are subsidiary activities conducted largely in conjunction with other types of farming.

An analysis of the table discloses a fairly definite trend in the last four years toward mixed farming. Single-purpose holdings have declined in number each year since 1930-31, and simultaneously the number of holdings devoted to two or more classes of activity has progressively increased. In 1930-31 there were 49,444 holdings devoted exclusively to agriculture, dairying, or grazing, and the number of such holdings had declined to 47,232

in 1935-36, or by 4.5 per cent. On the other hand, multiple-purpose holdings, which numbered 21,634 in 1930-31, increased to 23,340 in 1935-36, or by 7.9 per cent.

A detailed analysis showing the extent to which wheat growing was associated with other types of farming in the years 1932-33 and 1935-36 will be found at page 543 *et seq* of this Year Book.

Considering the use of holdings for each of the three principal purposes, either exclusively or in combination, the figures indicate some shift from grazing to agriculture and dairying during the years 1930-31 to 1932-33, doubtless encouraged by the low prices for wool. The change in the market in 1933-34 was reflected in a partial reversal of that movement which was again evident in 1934-35, but in 1935-36 the numbers varied little in comparison with the preceding year. Holdings on which dairying was practised increased in number between 1930-31 and 1933-34 by 2,398, or by 11.7 per cent.—a trend due mainly to the addition of dairying as a supplementary source of income, fostered by the relatively better prices obtained for dairy products as compared with agricultural or pastoral returns, but with a better outlook for the latter in 1935-36, and the adverse seasonal conditions for dairying, there has since been a slight decrease in the number of holdings engaged in that activity.

There has also been some increase in the number of holdings devoted to small farming, but the figures given above for poultry, pig and bee farming are not to be interpreted literally for the reasons stated on pages 657 and 662 of this edition.

The areas of land utilised for the principal forms of rural industry during the year 1930-31, the latest year of collection, compared with the preceding year, were as shown below:—

Divisions.	Agriculture.	Dairying.	Grazing.	Other Purposes.	Total.
	acres.	acres.	acres.	acres.	acres.
Coastal ... ..	286,494	4,783,201	7,407,892	308,729	12,786,316
Tablelands ... ..	620,284	354,150	18,788,406	171,282	19,934,122
Western Slopes ... ..	4,599,421	261,069	19,618,956	95,787	24,575,233
Plains ... ..	4,115,622	76,654	32,620,800	125,602	36,938,678
Western Division ... ..	57,828	7,634	77,462,510	10,008	77,537,980
Total, 1930-31 ... ..	9,679,649	5,482,708	155,898,564	711,408	171,772,329
„ 1929-30 ... ..	8,958,264	4,808,352	157,832,437	936,629	172,535,682

Meteorological circumstances play a considerable part in determining the uses to which land is put in the various districts, whilst apart from natural limitations due to the quality of the soil and configuration of the land, proximity to rail, seaport, or factory qualify the manner in which land may be utilised. The distribution of rainfall in relation to the geographical distribution of rural industries in New South Wales was shown in a map facing page 728 of the Year Book for 1924.

#### *Size of Holdings.*

Information regarding the size of rural holdings is available in two distinct classifications, one in accordance with the size of the alienated area only, excluding the Crown lands attached thereto, and the other in accordance with the total area of alienated and Crown land contained in each holding.

A table showing the number and size of holdings classified according to the total area of alienated and Crown lands combined as at 30th June, 1927, was published on page 683 of the Year Book for 1928-29, but similar information for a later year has not been compiled.

The following tabulation shows particulars of alienated holdings in New South Wales classified in area series as at 31st March, 1934:—

Area of Alienated Land in Holding.	Number of Alienated Holdings.	Aggregate Area of Alienated Land. (a)	Unimproved Capital Value of Alienated Land.	Improved Capital Value of Alienated Land.
acres.		acres.	£	£
1— 30... ..	9,052	120,358	2,548,640	7,523,810
31— 320... ..	26,825	3,926,802	17,918,460	49,643,810
321— 640... ..	11,576	5,569,802	12,607,350	34,205,910
641— 1,280... ..	10,996	10,129,999	17,666,320	49,310,940
1,281— 2,000... ..	4,983	7,952,454	11,414,980	32,385,680
2,001— 3,000... ..	3,054	7,480,803	10,054,070	28,603,500
3,001— 4,000... ..	1,398	4,849,672	6,509,850	18,037,670
4,001— 5,000... ..	819	3,661,733	4,788,560	13,090,420
5,001— 7,500... ..	1,050	6,304,257	8,094,280	21,520,200
7,501— 10,000... ..	445	3,850,080	4,911,510	12,468,760
10,001— 15,000... ..	378	4,569,423	6,068,340	15,837,920
15,001— 20,000... ..	173	2,993,812	3,768,640	9,041,380
20,001— 30,000... ..	142	3,408,580	4,216,620	10,348,990
30,001— 40,000... ..	54	1,870,551	2,133,520	5,130,910
40,001— 50,000... ..	26	1,157,536	1,234,930	2,859,750
50,001—100,000... ..	41	2,928,357	2,821,400	5,963,680
100,001 and over... ..	14	1,731,507	2,063,460	4,143,050
Total ... ..	71,026	72,505,729	118,820,930	320,116,390

(a) See explanation on page 674.

In the appended table the foregoing information relating to the number and area of alienated lands in area series is distributed according to the major statistical divisions of the State. It is to be noted, however, that in a great number of cases rural holdings comprise both alienated lands and lands leased from the Crown, and that, therefore, many holdings which, according to the table, appear inadequate as living areas, may, with the Crown lands worked in conjunction with the alienated area, fall within that class.

Size of Holdings of Alienated Lands.		Number and Area of Alienated* Holdings in Divisions at 31st March, 1934.					
		Coastal.	Tablelands.	Western Slopes.	Plains and Riverina.	Western Division.	Whole State.
Acres.							
1 to 30 ... { No.		6,250	1,037	937	774	54	9,052
31—320 ... { Acres		73,308	10,788	14,677	15,101	481	120,358
31—320 ... { No.		16,755	4,902	3,517	1,365	226	26,825
321—1,280 ... { Acres		2,483,000	730,483	515,927	168,561	28,231	3,926,802
321—1,280 ... { No.		5,920	4,834	7,430	4,223	165	22,572
1,281—5,000 ... { Acres		3,486,418	3,351,785	5,507,721	3,237,460	116,417	15,099,801
1,281—5,000 ... { No.		983	2,283	3,653	3,220	115	10,254
5,001—10,000 ... { Acres		2,166,366	5,305,897	8,392,144	7,715,576	304,679	23,944,662
5,001—10,000 ... { No.		94	315	460	585	35	1,495
10,001—20,000 ... { Acres		623,397	2,122,679	3,158,837	4,000,281	249,143	10,154,337
10,001—20,000 ... { No.		23	122	141	242	23	551
20,001—50,000 ... { Acres		339,553	1,619,666	1,943,116	3,328,370	332,524	7,563,238
20,001—50,000 ... { No.		12	29	38	136	7	222
Over 50,000 ... { Acres		353,117	745,643	1,016,777	4,105,350	215,780	6,436,667
Over 50,000 ... { No.		...	...	3	49	3	55
Totals ... { Acres		...	...	298,653	4,080,961	280,250	4,659,864
Totals ... { No.		30,037	13,582	16,185	10,594	628	71,026
Total Area of Divisions† ... Acres		9,525,759	13,952,941	20,847,852	26,651,672	1,527,505	72,505,729
Total Area of Divisions† ... Acres		22,286,000	25,847,000	28,181,000	41,395,000	80,319,000	198,028,000

\* See explanation on page 674. † Exclusive of part of harbours, lakes, etc., and Lord Howe Island.

The table shows that whilst lands classified as alienated comprised 36.6 per cent. of the total area of the State, the proportion alienated varied greatly between the divisions, ranging from only 1.9 per cent. in the Western Division up to 74 per cent. in the Western Slopes. Slightly less than two-thirds (64.4 per cent.) of the Plains and Riverina was alienated, and 54 per cent. of the Tablelands and 42.7 per cent. of the Coastal Division was so classified. Approximately two-thirds of the alienated lands were

within the Western Slopes and Plains of the Eastern and Central Land Divisions, which comprise rather less than one-third of the area of the State.

Owing to differences in productive capacity of the land, which varies greatly as between divisions and within divisions, and according to the form of rural enterprise to which the land is applied, an attempt to classify holdings according to size in relation to living areas can approach only a very rough approximation. For example, in 1934 there were on the Murrumbidgee, Hay, and Wentworth irrigation areas 1,644 holdings, covering an aggregate area of 299,479 acres, averaging approximately 182 acres per holding, but of these 237 at Wentworth averaged only 27 acres each. On the other hand it is accepted that a holding of 5,000 acres may be not more than adequate to provide a living area where poor grazing lands are utilized. Possibly, an area of about 1,280 acres may represent a normal area for general agricultural purposes; for dairying and orchards usually a much smaller area would suffice, whilst in the majority of cases grazing holdings would require to be considerably larger.

The following particulars relate to alienated holdings or alienated portions of holdings:—

Holdings not exceeding 1,280 acres in extent numbered 58,449 in 1934, representing 82.3 per cent. of the alienated holdings of the State, but embracing only 19,746,964 acres, or slightly more than one-quarter of the alienated lands. Holdings of more than 5,000 acres in area in the Eastern and Central Land Divisions numbered 2,255, with an aggregate area of 27,736,409 acres, and thus, over 39 per cent. of the freehold lands in those divisions were comprised in 3.2 per cent. of the total number of holdings containing alienated land. Of these approximately one-half (1,012) in the Plains and Riverina embraced 15,514,971 acres.

There were 648 holdings exceeding 5,000 acres in area in the Western Slopes, which aggregated 6,417,383 acres, and the Tablelands and Coastal Divisions contained 466 and 129 such holdings, embracing 4,487,988 acres and 1,316,067 acres respectively. Similar data for each of the statistical divisions of New South Wales are published in the Statistical Register of New South Wales for 1933-34.

#### *Number of Holdings and Average Area.*

Omitting holdings of less than 30 acres in extent, which generally are not important in relation to rural settlement, it is possible to trace from 1881 to 1934 the increase in the number of holdings in relation to the growth of population. This is shown in the following table:—

Year.	Holdings containing over 30 acres of Alienated* Land.			Mean Population.
	Number.	Area.	Average Area.	
		acres.	acres.	
1881	32,521	27,791,076	855	765,015
1891	38,706	41,046,249	1,060	1,142,025
1901	48,360	45,869,742	948	1,366,900
1911	57,089	51,943,846	910	1,665,265
1916	60,435	56,047,062	927	1,893,479
1921	61,505	61,003,468	992	2,108,493
1925	62,475	65,209,412	1,044	2,295,605
1930	61,875	73,113,486	1,182	2,532,497
1934	61,974	72,385,371	1,168	2,623,817

\* See explanation, page 674.

Many of the holdings enumerated above have leases attached to them, but the areas shown relate to alienated land only. When two or more holdings are owned by the same person they are enumerated separately.

The decline in area of alienated holdings between 1930 and 1934 is without significance. During 1931-32 the classes of lands to be returned under the category of alienated land were more specifically defined. It is evident that as a result some of the lands formerly returned as alienated have since been included as leasehold land. This observation applies equally in explanation of the apparent slight reversal of trend disclosed in the next succeeding table.

The development of alienation has been slower since 1901 than previously. The relative growth of settlement, alienation, and population may be readily illustrated by reference to index-numbers for which, in each case, the year 1901 is chosen as base and called 100:—

Year.	Index of Holdings containing over 30 acres of Alienated* Land.			Index of Mean Population.
	Number.	Area.	Average Area.	
1881	67	61	90	56
1891	80	90	112	84
1901	100	100	100	100
1911	118	113	96	122
1916	125	122	98	138
1921	127	133	105	154
1925	129	142	110	168
1930	128	159	125	185
1934	128	158	123	192

\* See explanation, page 674.

It is significant that up to the latest year shown in the table the population had grown at a much faster rate throughout than the number of holdings containing alienated land.

The number of alienated holdings increased at a slower rate than the area alienated, and the number of large holdings of alienated land increased in a marked degree since 1891. The increase, however, has not been uniform, and it assumed a new phase in 1912, after the imposition of the Federal Land Tax. The following table, which relates to individual holdings without regard to ownership, shows the number and area of the larger alienated holdings at intervals since 1891:—

Year.	Number of Alienated* Holdings of—			Area of Alienated* Holdings of—		
	5,000 to 20,000 acres.	Over 20,000 acres.	Total, Over 5,000 acres.	5,000 to 20,000 acres.	Over 20,000 acres.	Total, Over 5,000 acres.
1891	865	320	1,185	8,459,384	16,129,163	24,588,547
1901	938	357	1,295	9,286,972	17,203,765	26,490,737
1911	1,081	362	1,443	9,873,180	16,560,215	23,433,395
1921	1,558	301	1,859	13,935,997	12,949,858	26,885,855
1925	1,784	273	2,057	15,869,309	11,711,898	27,581,207
1930	2,091	292	2,383	18,110,763	11,678,741	29,789,504
1934	2,046	277	2,323	17,717,575	11,096,531	28,814,106

\* See explanation, page 674.

The Federal Land Tax (particulars of which are published in the chapter of this Year Book relating to Public Finance) was first imposed in 1910 upon so much of the unimproved value of lands owned by residents of Australia as exceeded £5,000, and upon all lands owned by absentees. The

value of land in New South Wales owned by absentees is negligible, and the assessed value of lands held on lease from the Crown is relatively of small account. The incidence of the tax, therefore, has fallen mainly upon large holdings of land absolutely alienated, or lands in course of alienation.

Up to 1911 the increase in the number of large alienated holdings had progressed fairly regularly, but in 1912 there was a decrease from 362 to 335 in the number of alienated holdings exceeding 20,000 acres in area, and an increase from 1,081 to 1,201 in the number between 5,000 acres and 20,000 acres in extent, but this change did not produce any reduction in the total area of alienated land contained in these large holdings. The number and area of alienated holdings containing more than 20,000 acres continued to decline at an appreciable rate until 1925, and the increase in the number in 1930 appears to have been ephemeral. The diminution has been offset by an increase since 1911 of 965 in the number, and 7,844,395 acres in the area of alienated holdings between 5,000 acres and 20,000 acres in extent. The total area of alienated land embraced in holdings exceeding 5,000 acres in area was almost stationary between 1901 and 1911, but between 1911 and 1934 it increased by 2,380,711 acres. However, there has been a steady diminution in the number and aggregate area of holdings of alienated lands exceeding 50,000 acres in extent. Whereas such holdings numbered 86, embracing 7,501,515 acres in 1912, the corresponding figures in 1934 were 55 holdings aggregating 4,659,864 acres.

#### *Tenure of Holdings.*

The tenure of land-holdings in New South Wales is principally of two classes—freehold and leasehold from the Crown. Only a small proportion of the total area occupied (approximately 2 per cent.) is rented from private owners, although the area held on lease from the Crown is very large. Tenancy, as understood in older countries is, therefore, of small extent, and a very large proportion of the total alienated area is occupied by its owners.

The following table shows the area occupied in each division of New South Wales, according to the class of tenure, as at 31st March, 1936. Owing to rearrangement of the divisions on the basis of Local Government areas in 1922-23, divisional comparisons cannot be made effectively with figures published prior to that year.

Division.	Alienated* or virtually alienated.	Leased from Crown with full rights of conversion into free- hold.	Leased from Crown with limited rights of conversion into free- hold.	All other leases held from Crown.	Total Area in Holdings.
	acres.	acres.	acres.	acres.	acres.
Coastal ... ..	9,476,640	1,371,554	174,677	1,200,162	12,232,033
Tableland ... ..	14,346,889	3,713,282	419,936	1,293,671	19,773,778
Western Slopes ... ..	21,099,283	2,580,987	374,293	1,138,502	25,193,065
Central Plains and Riverina ... ..	28,028,727	6,521,150	900,035	1,514,100	36,964,012
Western ... ..	6,030,044	364,997	14,658	71,884,089	78,293,788
New South Wales ... ..	78,981,583	14,551,970	1,833,599	77,039,524	172,456,676

\*See explanation, page 674.

Of the total area occupied, 45.8 per cent. was classed as freehold, and the remaining 54.2 per cent. as Crown land, including 9.5 per cent. leased with full or limited rights of conversion into freehold. Of the other Crown land leases, 93 per cent. were in the Western Division, and utilised almost exclusively for depasturing stock.

Almost 12 per cent. of the land alienated, or virtually alienated, is situated in the Coastal Division, where it amounts to over 77 per cent. of the total area occupied in holdings. These farms are used chiefly for dairying.

The proportions of the total area of the respective divisions occupied in holdings of various classes in 1935-36 are shown in the following table:—

Division.	Alienated* or virtually alienated.	Leased from Crown with full rights of conversion into free- hold.	Leased from Crown with limited rights of conversion into free- hold.	All other leases held from Crown.	Proportion of Total Area under Occupa- tion.
	per cent.	per cent.	per cent.	per cent.	per cent.
Coastal ... ..	42·52	6·15	0·78	5·43	54·88
Tableland ... ..	55·51	14·37	1·62	5·00	76·50
Western Slopes ... ..	74·87	9·16	1·33	4·04	89·40
Central Plains and Riverina ... ..	67·71	15·75	2·18	3·66	89·30
Western ... ..	7·51	0·45	0·02	89·50	97·48
New South Wales ... ..	39·89	7·35	0·95	38·90	57·09

\* See explanation, page 674.

Slightly more than 87 per cent. of the total area contained within the boundaries of the State is occupied in holdings of 1 acre and upwards used for agricultural or pastoral purposes. The highest proportion of alienation, 74.87 per cent. of the area of the division, has taken place in the Western Slopes, and the lowest, 7.51 per cent., in the Western Division. But taking the total area of holdings, the Western Division shows the largest proportion of its area—97.5 per cent.—under occupation. The proportions are high also in the Central Plains and Riverina, 89.3 per cent., and the Western Slopes, 89.4 per cent.

If reference be made to the table on page 683 of the Year Book for 1928-29 it will be seen that the proportion of lands used for agricultural and pastoral purposes in each division decreases as the intensity of settlement increases. At the same time it is apparent that the density of settlement bears an approximate relationship to physical configuration and average rainfall. While the greater intensity of settlement in the more easterly districts necessitates the allocation of larger proportions of land for public purposes, it is undeniable that a very considerable proportion of the remaining Crown land in the Eastern Division is so rugged or wooded as to be unfit or unprofitable for occupation. This is especially the case in the South Coast Division, which in parts is very mountainous, only 38 per cent. of the total area being occupied by rural holdings, as compared with 68 per cent. in the North Coast Division and 60 per cent. in the Hunter and Manning.

#### VALUE OF ALIENATED RURAL LANDS.

Information as to the improved and unimproved capital values of lands was first collected for statistical purposes in 1920-21. The particulars relate to the value, on a freehold basis, of lands absolutely alienated, in course of alienation, or held as homestead farms or homestead selections and used for agricultural and pastoral purposes.

The unimproved capital value was defined as being the amount which the land might be expected to realise if sold under such reasonable conditions as a *bona fide* seller would require, assuming that the actual improvements had not been made, and the improved capital value as the value of the land with all improvements and buildings thereon under similar conditions of

sale. Where particulars of unimproved value are not available from owners, collectors are instructed to obtain them from the records of Shire Councils, so that the unimproved values quoted may be taken as representing local government assessments, except in the Western Division, where no shires exist.

Where valuations have been made by the Valuer-General it has been found that valuations formerly made for local government purposes were below actual values. In many cases the discrepancy was considerable, and in the aggregate the valuations of shires are probably under-estimated by more than 20 per cent. Since municipal lands are of comparatively small extent, and very few shires assess improved values, particulars of improved capital value were obtained from the owners. In the table which follows, then, the unimproved capital value represents in most cases the shire valuation, but the improved values are obtained from the owner's assessment of the value of the land and its improvements. It is not possible to deduce the value of the improvements from the figures.

The following table shows in divisions of the State (on the basis of Local Government areas) the distribution of alienated and Crown lands occupied in holdings of one acre and upwards for agricultural and pastoral purposes, together with the total and average value of the alienated lands at 31st March, 1936:—

Division.	Alienated* Land in Occupation in Holdings of one acre and over.					Area of Crown Land.
	Area.	Unimproved Capital Value of Land.		Improved Capital Value.		
		Total.	Average per acre.	Total.	Average per acre.	
	Acres.	£	£	£	£	Acres.
<i>Coastal—</i>	000.	000.		000.		000.
North Coast ...	3,326	12,118	3·64	30,549	9·18	1,387
Hunter and Manning ...	4,078	9,132	2·24	25,147	6·17	905
Metropolitan ...	289	3,258	11·27	7,760	26·81	2
South Coast ...	1,784	4,505	2·53	11,791	6·61	461
Total ...	9,477	29,013	3·06	75,247	7·94	2,755
<i>Tablelands—</i>						
Northern ...	4,213	5,423	1·29	13,811	3·28	2,285
Central ...	6,016	9,249	1·54	29,329	4·88	1,626
Southern ...	4,118	5,384	1·31	15,810	3·84	1,516
Total ...	14,347	20,056	1·40	58,950	4·11	5,427
<i>Western Slopes—</i>						
North ...	6,321	10,292	1·63	25,186	3·98	1,943
Central ...	6,197	9,450	1·52	29,247	4·72	740
South ...	8,581	15,345	1·79	48,055	5·60	1,411
Total ...	21,099	35,087	1·66	102,488	4·86	4,094
<i>Plains—</i>						
North-central ...	5,081	5,900	1·16	13,486	2·65	2,543
Central ...	3,909	8,040	0·90	18,789	2·11	4,406
Riverina ...	14,039	20,795	1·48	52,564	3·74	1,986
Total ...	28,029	34,735	1·24	84,839	3·03	8,935
<i>Western Division</i> ...	6,030	1,183	0·20	3,127	0·52	72,264
<i>Whole State</i> ...	78,982	120,074	1·52	324,651	4·11	93,475

\* See explanation, page 674.

Particulars of the rainfall, productivity, and population of each of these divisions are shown on page 684. The average value per acre is closely related to these factors. The alienated lands in the Western Division are situated mainly in its eastern confines, and the value thereof does not afford any indication of the value of the extensive Crown lands situated further west.

The unimproved value of the alienated portions of rural holdings in series as at 31st March, 1934, is shown in the following table. The totals as at 30th June, 1930, are also appended, but in view of the method of arriving at valuations, as explained on the preceding page the comparative significance of the figures is limited.

Unimproved Value of Alienated* Holdings or Alienated Portions of Holdings.	Number of Wholly or Partly Alienated Holdings.	Aggregate Alienated Area of Holdings.	Unimproved Value of Alienated Area of Holdings.	Average Unimproved Value per Acre.
£		acres.	£	£ s.
Under 500 ... ..	25,446	3,907,144	5,688,280	1 9
500— 999 ... ..	14,249	6,338,381	10,146,890	1 12
1,000— 1,999 ... ..	16,427	12,549,932	22,759,640	1 16
2,000— 2,999 ... ..	6,619	8,463,466	15,708,550	1 17
3,000— 4,999 ... ..	4,389	9,595,947	16,276,590	1 14
5,000— 9,999 ... ..	2,448	9,937,936	16,307,000	1 13
10,000—14,999 ... ..	646	4,880,532	7,749,840	1 12
15,000—19,999 ... ..	297	3,361,885	5,064,770	1 10
20,000 and over ... ..	505	13,470,506	19,119,370	1 8
Total... ..	71,026	72,505,729	118,820,930	1 13
Total as at 30th June, 1930	70,595	73,231,375	124,203,880	1 14

\* See explanation, page 674.

A table containing corresponding particulars for each of the sixteen statistical divisions of the State was published on page 374 of the "Statistical Register of New South Wales" for 1933-34. Owing to the wide differences between the productive uses of lands in the various divisions it is necessary to refer to this more detailed table.

#### CHARACTER OF SETTLEMENT.

A brief description of the character of rural settlement in New South Wales was published on page 689 of the Year Book for 1928-29 and a map showing the distribution of the rainfall, population and rural industries of the State was published opposite page 728 of the Year Book for 1924.

The following analysis of the State, according to natural divisions on the basis of Local Government areas, shows the rainfall, population, area, and production of each. A map showing these divisions is published as a frontispiece to this Year Book:—

Division.	Range of Average Annual Rainfall.	Popu-lation at 31st Dec. 1935. *	Total Area. †	Production (1935-36).				
				Wool.	Wheat.	Butter.	Minerals. ‡	Manu- factures 
	inches.		acres.	lb.	bushefs.	lb.	£	£
<i>Coastal—</i>		000	000	000	000	000	000	000
North Coast ...	37-78	152	6,965	116	...	68,659	9	1,166
Hunter and Manning ...	22-60	309	8,396	6,193	14	24,602	2,984	7,354
Metropolitan ...	27-47	1,384	958	148	...	508	} 1000	54,019
South Coast ...	28-61	110	5,968	3,372	1	12,534		2,147
Total ...	...	1,955	22,287	9,829	15	106,303	3,993	64,686
<i>Tablelands—</i>								
Northern ...	29-39	55	8,069	24,390	60	1,663	209	205
Central ...	23-55	144	10,716	46,000	2,516	2,699	768	1,044
Southern ...	19-63	51	7,062	32,539	41	730	12	305
Total ...	...	250	25,847	102,929	2,617	5,092	989	1,554
<i>Western Slopes—</i>								
North ...	21-32	65	9,219	45,843	3,477	2,366	56	246
Central ...	18-28	65	7,723	39,510	8,615	1,742	14	206
South ...	17-39	119	11,239	60,299	14,459	7,919	67	603
Total ...	...	249	28,181	145,652	26,551	12,027	137	1,055
<i>Central Plains—</i>								
Northern ...	20-28	31	9,579	37,489	1,597	163	2	130
Central ...	16-22	28	14,811	47,729	1,435	212	19	105
Riverina ...	12-23	87	17,004	62,107	16,604	1,329	35	430
Total ...	...	146	41,394	147,325	19,636	1,704	56	665
<i>Western Division ...</i>	7-18	53	80,319	66,850	3	43	1,817	1,510
Whole State ...	...	2,653	198,028	472,585	48,822	125,169	6,992	69,470

\* Excluding aboriginals.

† Excluding area of harbours not included in local government areas.

‡ Calendar year, 1935.

|| Value added in process of manufacture.

Manufactories are not extensive outside the metropolitan, Newcastle, and Port Kembla districts, except for dairy factories in the coastal districts. Smelting and metal works of considerable importance are established on the coal-fields of the South Coast, at Newcastle and on the silver-lead fields at Broken Hill in the Western Division. A number of cement works are also operating in the Central Tableland Division and woollen mills at several of the more important country towns.

The five principal topographical divisions are strips of territory running from the northern to the southern boundary in a south-westerly direction, embracing, respectively, the coastal belt, tablelands, western slopes, central western plains and Western Division or far western plains. Except for the western plains, each is divided into three portions—northern, central, and southern—which, with the inclusion of a special metropolitan district, makes fourteen subdivisions, each of which presents fairly uniform natural features and is affected by uniform physiographic factors. In the north the region of high average rainfall extends further inland than in the south, with the result that the isohyets run in a general north and south direction. The south-western extremity of the Riverina lies about 100 miles further from the coast than does the north-western extremity of the northern plain, and, as the average annual rainfall diminishes with increasing rapidity towards the west, the northern subdivisions shown above generally receive more rain than the central, and the central more than the southern subdivisions. Rather less than one-half of the total area of the State receives average rains exceeding 20 inches per year, and rather more than one-half receives an average of more than 15 inches per year. Where the rainfall is greatest conditions generally favour the dairying industry, the areas with moderate rainfall being more suitable for sheep and wheat. In the dry western areas wool-growing is the only important rural industry.

Not only the quantity, but the season and reliableness of the rainfall, and the amount of evaporation are important considerations in determining the productive possibilities of any region. In common with most countries, New South Wales suffers periodically in one part or another from the effects of intermittent rainfall, a disability which local conditions such as the abnormal evaporation and the absorbent nature of the soils of the interior tend to aggravate. This difficulty may be overcome ultimately by water conservation and improvement in cultural methods, but at present it operates powerfully to the detriment of the western hinterland.

The meteorological conditions of the respective divisions of the State are discussed in greater detail in the chapter "Climate" of this Year Book.

#### SETTLEMENT IN DIVISIONS.

Rainfall exerts a decisive effect on the nature of the pursuits and the extent of settlement in the various rural districts of the State, and largely explains their industrial characteristics.

For the purpose of considering rural settlement, the State may be distributed into five statistical divisions, viz., Coast, Tableland, Western Slopes of the Great Dividing Range, Central Plains and Riverina, and the Western Division. The statistics for 1922-23 and subsequent years have been collected upon the basis of local government areas instead of counties, as formerly, and this necessitated considerable rearrangement of divisional boundaries.

The nature of the industries and the settlement of each of the principal divisions of the State were discussed in the Official Year Book, 1922, at page 681 *et seq.*

*Coastal Districts.*

The following table presents a summary of the tenure and extent of occupied holdings in the four main divisions of the coastal belt as at 31st March, 1936:—

Division of Coast.	Total Area of Division.	Land occupied in Holdings of One acre and upwards for Agricultural and Pastoral Purposes.						
		Holdings of One acre and upwards.	Alienated.*	Leases from the the Crown with		All Other Crown Leases.	Total.	Area of Holdings suitable for Cultivation.
				Full rights of Con-version.	Limited rights of Con-version.			
	acres.	No.	acres.	acres.	acres	acres.	acres.	acres.
	000		000	000	000	000	000	000
North ... ..	6,965	11,929	3,326	562	73	752	4,713	556
Hunter-Manning ...	8,396	9,319	4,078	561	68	276	4,983	432
Metropolitan ..	958	5,373	289	1	...	1	291	158
South ... ..	5,968	4,648	1,784	247	34	180	2,245	373
Total .. ..	22,287	31,269	9,477	1,371	175	1,209	12,232	1,519

\* See explanation, page 674.

Apart from the small area in the county of Cumberland which surrounds the metropolis, the North Coast is by far the most closely-settled part of the Coastal Division. The average areas of holdings in the various divisions are:—North Coast, 395 acres; Hunter and Manning, 535 acres; and South Coast, 483 acres. The proportions of the total area of each division occupied in holdings as defined is 68 per cent. in the North Coast Division, 60 per cent. in that of Hunter and Manning, but only 38 per cent. on the South Coast.

Included in the coastal districts are 2,389 holdings, on which 3,161 share-farmers cultivated 46,228 acres and used 661,290 acres as dairy farms. Of the holdings with share-farmers 2,051 were used for agriculture and dairying in combination, 169 for agriculture exclusively and 169 for dairying only.

Owing to the rugged nature of the country only a small proportion of the land is considered suitable for cultivation, and of this area less than one-quarter was cultivated in 1935-36.

The following analysis shows the main purposes for which the holdings in the coastal districts were used in 1935-36 in comparison with 1929-30:—

Principal Purpose for which Holdings were Used.*	1929-30.	1935-36.				
	All Coastal Divisions.	North Coast.	Hunter and Manning.	Metropolitan.	South Coast.	Total.
		Number of Holdings.				
Agriculture only ... ..	4,664	1,370	1,462	2,014	471	5,317
Dairying only* ... ..	12,346	6,643	4,173	752	2,097	13,665
Gazing only* ... ..	6,104	1,145	1,786	187	1,107	4,225
Agriculture and dairying* ...	2,473	1,867	681	89	301	2,938
Agriculture and grazing* ...	705	157	152	27	164	500
Dairying and grazing* ...	1,054	279	342	10	116	747
Agriculture, dairying, and grazing*	240	59	52	4	27	142
Poultry† ... ..	1,239	7	312	1,897	88	2,304
Bees, Pigs, etc.† ... ..	176	23	26	156	34	239
Unoccupied, or used mainly for other purposes .. ..	1,676	379	333	237	243	1,192
Total ... ..	30,677	11,929	9,319	5,373	4,648	31,269

\* See comments at page 675.

† See comments at pages 657 and 662.

The coastal district contains 91 per cent. of the holdings used for dairying only in New South Wales, and the North Coast district contains 48 per cent. of the number in the coastal division. Dairying separately or in conjunction with other farming pursuits is the predominant industry, but a considerable proportion of the farms is used for cattle-raising. A pronounced reduction in the number of holdings devoted to grazing accompanied by an increase in the number of holdings applied to dairying was in evidence between 1929-30 and 1933-34, since when the number of purely dairy holdings has varied very little. The change was doubtless due to low prices for beef, diverting activities into dairying where returns were relatively higher. Between 1929-30 and 1933-34 there was an increase in the number of holdings devoted exclusively to agriculture, almost solely due to the rapid extension of banana growing, and virtually confined to the North Coast, where the number of agricultural holdings was 1,667 in 1933-34 compared with 579 in 1929-30. This position was not maintained, the number of holdings used principally for agricultural purposes on the North Coast declining to 1,525 in 1934-35, and to 1,370 in 1935-36. There were 371 fewer holdings growing bananas in 1935-36 than in 1934-35.

#### Tablelands.

Although extensive plateaux exist in the Tableland Divisions, considerable areas are rugged and rock-strewn and not adaptable to agriculture. Hence grazing has remained the staple industry, although many farmers combine agriculture with grazing, and large areas are cultivated in suitable localities. The rainfall is ample throughout, and the headwaters of most of the principal rivers make this a well-watered region. Railway communications are good, but, except on the Central Tableland, settlement is sparse, fewer flourishing towns exist than on the coast, and small settlements are rarer because lands suitable for intense farming are more scattered. Neither dairying nor agriculture has been developed to any appreciable degree, and pastoral pursuits are extensive.

The following table provides an analysis of the number and tenure of rural holdings in the three main divisions of the Tablelands as at 31st March, 1936:—

Division of Tableland.	Total Area of Division.	Land occupied in Holdings of one acre and upwards for Agricultural and Pastoral Purposes.						
		Holdings of one acre and upwards.	Alienated.*	Leases from the Crown with—		All other Crown Leases.	Total.	Area of Holdings suitable for Cultivation.
				Full rights of Conversion.	Limited rights of Conversion.			
	acres.	No.	acres.	acres.	acres.	acres.	acres.	acres.
	000		000	000	000	000	000	000
Northern ...	8,069	3,715	4,213	1,656	178	450	6,497	453
Central ...	10,716	7,442	6,016	1,250	149	227	7,642	1,736
Southern ...	7,062	3,154	4,118	807	93	617	5,635	440
Total ...	25,847	14,311	14,347	3,713	420	1,294	19,774	2,629

\* See explanation, page 674.

While the proportion of land occupied in each division varies from 80 per cent. in the northern and the southern, to 70 per cent. in the central tablelands, rural settlement is densest in the central districts, which were the first to be occupied. More than one-half of the total area of the Tableland Division is alienated, and more than one-quarter of the area occupied is owned by the Crown. In addition, there were 711 share-farmers on 529 holdings, comprising 72,843 acres of cultivation and 20,155 acres of dairy

farms. Of the holdings with share-farmers, 456 were used for agricultural purposes only, 15 for dairying only and 58 for agriculture and dairying together. As in the Coastal Division, the proportion of land suitable for cultivation is very small, only 20 per cent. of such land being cropped in 1935-36.

The main purposes for which holdings were used in each division of the tablelands in 1929-30 and 1935-36 are shown in the following table:—

*Principal Purpose for which Holdings were used.	1929-30.	1935-36.			
	All Tableland Divisions.	Northern Tableland.	Central Tableland.	Southern Tableland.	Total.
NUMBER OF HOLDINGS.					
Agriculture only ... ..	1,564	180	1,203	43	1,426
Dairying only* ... ..	484	208	302	78	588
Grazing only* ... ..	8,701	2,142	3,034	2,585	7,761
Agriculture and Dairying* ... ..	310	193	285	31	509
Agriculture and Grazing* ... ..	2,351	662	1,815	242	2,749
Dairying and Grazing* ... ..	309	118	93	72	288
Agriculture, Dairying, and Grazing* ... ..	229	81	274	32	387
Poultry, Bees, Pigs, etc. ... ..	59	14	97	16	127
Unoccupied or used for other purposes ... ..	571	117	304	55	476
Total ... ..	14,878	3,715	7,442	3,154	14,311

\* See comments on page 675.

Grazing pursuits predominate throughout, but a considerable proportion of the holdings is used for agricultural purposes. A tendency toward the diversification of rural activity is seen in an increase of 12.6 per cent. between 1929-30 and 1935-36 in the number of holdings devoted to two or more of the principal purposes. Holdings used either wholly or partly for dairying increased in number by 634 between 1929-30 and 1934-35, but declined by 197 in 1935-36, probably due to the discontinuance of dairying activities undertaken when returns from other farming activities were poor during the years of depression.

#### Western Slopes.

The divisions of the Western Slopes contain gently undulating lands with a westerly trend, watered by the upper courses of the inland rivers, and an adequate and regular rainfall. These fertile areas are eminently suitable for agriculture and are, with the Riverina, the most productive portions of the interior. As yet they are only sparsely settled, and very great development is possible.

The area, number, and tenure of rural holdings in the various divisions of the Western Slopes as at 31st March, 1936, are shown below:—

Division of Slopes.	Total Area of Division.	Area of Land occupied in Holdings of one acre and upwards for Agricultural and Pastoral purposes.						
		Holdings of one acre and upwards.	Alienated *	Leases from the Crown with—		All other Crown Leases.	Total.	Area of Holdings suitable for Cultivation.
				Full rights of Conversion.	Limited rights of Conversion.			
	acres.	No.	acres.	acres.	acres.	acres.	acres.	acres.
North-Western	9,219	4,279	6,321	1,524	282	137	8,264	1,563
Central-Western	7,723	4,398	6,197	571	23	143	6,937	4,273
South-Western	11,239	7,989	8,581	486	66	859	9,992	5,151
Total	28,181	16,666	21,099	2,581	374	1,139	25,193	11,287

\* See explanation, page 674.

In these divisions settlement is most dense on the South-western Slope, but the proportion of occupied land is greatest in the northern districts. The proportion of land occupied in the Slopes is 89 per cent. of the total area of the whole division. The area of land suitable for cultivation is considerable, constituting 38 per cent. of the total area of such land in the State. Of the land under occupation in the Slopes Division only 11 per cent. was under crop in 1935-36.

There were 2,858 share-farmers on 2,137 holdings on the Western Slopes in 1935-36 cultivating 612,352 acres and using 48,069 acres for dairying. Fifty-eight of these holdings were devoted exclusively to dairying, 1,948 entirely to agriculture and 131 to dairying and agriculture in combination.

The following statement shows the principal purposes for which rural holdings were used in the Western Slopes Division in 1929-30 and 1935-36:—

*Principal Purpose for which Holdings were used.	1929-30.	1935-36.			
	All Slopes Division	North-Western Slope.	Central-Western Slope.	South-Western Slope.	Total.
NUMBER OF HOLDINGS.					
Agriculture only ... ..	1,649	283	287	929	1,499
Dairying only* ... ..	361	154	58	359	571
Grazing only* ... ..	5,572	1,794	821	2,008	4,623
Agriculture and Dairying* ... ..	310	179	76	240	495
Agriculture and Grazing* ... ..	7,933	1,572	2,805	3,433	7,810
Dairying and Grazing* ... ..	211	54	29	267	350
Agriculture, Dairying, and Grazing* ... ..	395	101	223	545	569
Poultry, Bees, Pigs, etc. ... ..	51	48	19	22	89
Unoccupied or used for other purposes ... ..	486	94	80	186	360
Total ... ..	16,968	4,279	4,398	7,889	16,666

\* See comments on page 675.

Mixed farming—agriculture and grazing—is the principal rural activity, but grazing predominates on the North-Western Slope, where the lands fit for agricultural purposes is large, but small farming is not extensive. Amalgamation of holdings and abandonment of areas for fruit growing in the Young district were mainly responsible for a decline of 197 in the number of holdings devoted to agriculture only in 1935-36. There have been developments in dairying, mainly in the South-Western Slope. Dairying was practised on only 7.8 per cent. of the holdings of the Western Slopes in 1927-28, but although there was a decline of 113 in the number of holdings with dairy herds in 1935-36, the proportion engaged in dairying that year was 13.7 per cent.

The table reveals a pronounced movement toward mixed farming. Single purpose holdings were 11.7 per cent. fewer in number in 1935-36 than in 1929-30.

#### *Plains and Riverina.*

The Plains of the Central Division, including the Riverina, constitute the eastern portion of a remarkable extent of almost level country, stretching from the last hills of the Western Slopes to the western boundary of the State. With an average width of 120 miles, they comprise the great sheep districts of the State and about 40 per cent. of the agricultural lands. Generally speaking, they are not well watered, the average rainfall is low, and its intermittency is a source of frequent loss. They are traversed by the western rivers in their lower courses, but they do not supply water to a very extensive area, as they are few and their flow is irregular. Schemes of irrigation, however, have greatly increased the productive capacity of these inland areas, and further works for water conservation and distribution are in hand and in contemplation. Railway facilities are not so good as in the

more easterly districts, and communication and transport to outlying districts depend mostly on motor and horse-drawn conveyances. Artesian water underlies a considerable area on the north, and bores serve to supply permanent water in a number of localities. In the south, sub-artesian bores are of great practical utility.

The following table shows the number, tenure, and extent of holdings occupied for agricultural and pastoral purposes in the division on 31st March, 1936:—

Plains of Central Division,	Total Area of Division.	Area of Land occupied in Holdings of one acre and upwards for Agricultural and Pastoral Purposes.						
		Holdings of one acre and upwards.	Alienated.*	Leases from the Crown with—		All other Crown Leases.	Total.	Area of Land suitable for Cultivation.
	acres. 000	No.	acres. 000	acres. 000	acres. 000	acres. 000	acres. 000	acres. 000
North ...	9,579	1,864	5,081	2,024	315	203	7,623	1,506
Central ...	14,811	2,447	8,909	3,371	520	515	13,315	3,425
Riverina ...	17,004	7,314	14,039	1,126	65	796	16,026	7,164
Total ...	41,394	11,625	28,029	6,521	900	1,514	36,964	12,095

\* See explanation, page 674.

The existence of a closely-settled but comparatively small area of irrigated lands in the Riverina partly accounts for the density of settlement in that division. At 31st March, 1936, there were 1,368 holdings in the Murrumbidgee Irrigation Area embracing 304,034 acres inclusive of certain attached lands outside the Irrigation Area. Seventy-eight per cent. of the area occupied in the Central Plains and Riverina Division has been alienated, but while the proportion alienated is 66 per cent. of the total area occupied in the northern districts and 67 per cent. in the Central Plains, it is 87 per cent. in the Riverina, where the land is more productive.

The area of Crown lands occupied is considerable in all divisions, and in the central districts it exceeded the area of occupied alienated lands until 1926-27.

Share-farming is not extensive in the north, but in the Riverina, 867 holdings employed 1,153 share-farmers, who had 275,931 acres in cultivation and used 5,711 acres for dairying in 1935-36. Only 20 per cent. of the land in the Northern Plains is considered suitable for agriculture, but the proportions in the Central Plains and Riverina are 26 and 45 per cent. respectively.

The following table shows the main purposes for which the holdings in the Central Plains and Riverina Division were used in 1935-36 in comparison with 1929-30.

Principal Purpose for which Holdings were used.*	1929-30.	1935-36.			
	Plains & Riverina.	Northern Plains.	Central Plains.	Riverina.	Total
		Number of Holdings.			
Agriculture only ... ..	2,013	41	110	1,590	1741
Dairying only* ... ..	86	18	12	96	126
Grazing only* ... ..	4,179	1,127	1,555	1,324	4,006
Agriculture and Dairying* ... ..	76	1	...	123	124
Agriculture and Grazing* ... ..	4,892	648	709	3,548	4,905
Dairying and Grazing* ... ..	30	2	5	48	55
Agriculture, Dairying, and Grazing* ... ..	169	6	15	414	435
Poultry, Bees, Pigs, etc. ... ..	2	1	2	12	15
Unoccupied or used for other purposes ... ..	311	20	39	159	218
Total ... ..	11,758	1,864	2,447	7,314	11,625

\* See comments on page 675.

While grazing, with mixed farming and agriculture, predominates in the northern districts, agriculture assumes increasing importance in the south, and, combined with grazing, it predominates in the Riverina. On the irrigated lands of the Murrumbidgee a considerable number of holdings are used for small farming, and there were 4,163 holdings on which wheat for grain was grown in 1935-36 in the Riverina. Taking into account the areas shown in the previous table, the existence of agricultural pursuits is seen to have a very pronounced effect on the density of settlement.

Comparing figures for this division for 1935-36 with those for 1929-30, single purpose holdings declined in number by  $6\frac{1}{2}$  per cent., while holdings used wholly or in part increased for grazing from 9,270 to 9,401, for agriculture from 7,150 to 7,205 and for dairying, from 361 to 740.

#### *Western Division.*

The plains of the Western Division will probably never be developed into a productive region maintaining a population commensurate with their area. One-third of the division receives, on the average, less than 10 inches of rain per year and practically the whole of the remainder less than 15 inches. Though the soils are uniformly fertile, the lack of rain, permanent water and grasses, and the high rate of evaporation, ranging up to 90 inches per year, render it unproductive in a high degree. Except on a few small irrigated areas there is scarcely a sign of agriculture or dairying, and by reason of the small rainfall, the sheep-carrying capacity of the land is only about one-fifth as great as that of the plains further east; but the climate is well suited to the production of high-grade merino sheep. It is a lonely region, for the most part occupied in large holdings on a long or perpetual lease tenure. It presents an immense field for scientific development, but its possibilities are problematical. Whether irrigation from the Murray and the vast lake reservoirs of the South Darling, combined with dry-farming methods, will render any extensive areas adaptable to agriculture, or whether water and fodder conservation will render it capable of maintaining large numbers of sheep and suitable for closer settlement, remain questions which are not likely to be considered until settlement in the more attractive easterly regions has made very great advance. It was contended, however, that in the south there are large areas which only required railway facilities to render them profitable for agriculture, but results so far attained are not encouraging. At present, excluding the mining districts, it is a vast region comprising two-fifths of the area of the State, producing less than one-sixth of the pastoral produce, and practically nothing besides, and inhabited by less than 20,000 persons (one person to 6 square miles, or less than one per cent. of the State's population). Near the western boundary, however, is situated one of the richest silver-lead fields of the world, and in the large mining town of Broken Hill there is a population of about 27,000 persons. In the eastern part of the division exist extensive copper deposits, which formerly maintained thriving settlements at Cobar, Canbelego, and Nymagee, but with the suspension of mining activities the population of these localities declined and has not increased significantly as a result of recent limited attempts to work the low grade copper deposits. For the rest, the division possesses only one town, Bourke, with a population exceeding 1,500, five exceeding 500, and about twenty smaller townships.

The following table shows the number and extent of holdings (as distinct from landholders) in the Western Division as at 30th June, 1927, the last year for which this information is available:—

Area Series (alienated and Crown lands combined).	East of Darling.		West of Darling.	
	No. of Holdings.	Area of Holdings.	No. of Holdings.	Area of Holdings.
		Acres.		Acres.
1- 3,000 ... ..	392	103,851	142	85,735
3,001- 10,000 ... ..	79	510,637	65	465,547
10,001- 20,000 ... ..	164	2,380,575	115	1,523,670
20,001- 50,000 ... ..	242	7,495,068	169	5,329,802
50,001-100,000 ... ..	77	5,096,619	92	6,323,365
Over 100,000 ... ..	92	18,800,169	103	29,981,139
Total ... ..	1,046	34,386,919	686	43,709,258

Although the area west of the Darling constitutes more than one-half of the total area occupied, the number of holdings in all but the two largest groups was less than in the eastern sector. Over 62 per cent. of the total area was occupied by 195 holdings averaging 250,000 acres each.

The total area of alienated land in the rural holdings in the Western Division as at 31st March, 1936, was only 6,030,044 acres. The total area of Crown land in rural holdings was 71,884,089 acres. Of the total area of land occupied, only 18,712 acres were under crop in 1935-36, although 2,205,562 acres of land were considered by the occupiers to be suitable for cultivation. The unimproved value of the alienated land was returned as £1,183,360, and the improved value as £3,127,420.

#### VALUE OF MACHINERY USED ON RURAL HOLDINGS.

A comparison of the value of agricultural, pastoral, and dairying implements and machinery in use on rural holdings during various years since 1901 is shown in the following table, allowance being made for depreciation:—

Season.	Agricultural.	Dairying.	Pastoral.*	Total Value.†
	£	£	£	£
1900-01	2,065,780	237,220	754,050	3,057,050
1905-06	2,557,260	365,440	1,120,990	4,043,690
1910-11	3,414,620	534,740	1,483,080	5,432,440
1915-16	5,362,030	570,950	2,015,050	7,948,030
1920-21	7,120,380	910,260	3,141,030	11,171,670
1922-23	8,536,170	1,124,960	3,816,250	13,477,380
1923-24	8,799,350	1,088,380	3,825,920	13,713,650
1924-25	9,427,730	1,119,290	4,106,820	14,653,840
1925-26	9,588,320	1,162,850	4,329,910	15,081,080
1926-27	9,837,190	1,232,290	4,928,300	15,997,780
1927-28	10,849,510	1,229,430	4,975,180	17,054,120
1928-29	10,883,550	1,214,670	5,067,940	17,166,160
1929-30	10,955,920	1,193,000	4,812,060	16,960,980
1930-31	10,526,390	1,171,000	4,676,920	16,374,310
1931-32	9,526,396	1,149,387	4,125,417	14,801,200
1932-33	8,869,795	1,214,919	3,885,203	13,969,917
1933-34	8,607,639	1,221,409	3,855,433	13,684,481
1934-35	8,486,935	1,235,921	3,788,309	13,511,165
1935-36	9,039,026	1,218,672	4,163,797	14,421,495

\* Includes in many cases farming implements used on pastoral holdings.

† Excludes machinery, etc., used for poultry, pig and bee farming.

In 1935-36 the value of machinery used in holdings devoted to poultry, pigs and bees amounted to £290,427, compared with £148,274 in 1931-32 and £274,739 in 1934-35.

The figures indicate substantial progress in the mechanisation of the rural industries, and notably, of agricultural operations. The decline in total value in evidence between 1929-30 and 1934-35 was apparently due to depreciation and non-replacement of existing machinery during the period of depression which affected agriculture with particular severity, the appreciable increase in 1935-36 having synchronised with a notable recovery of wheat and wool values. Increases in the years 1931-32 to 1934-35 and the decline in 1935-36 in the value of dairying machinery contrary to the general trend are explained by the development and subsequent contraction of that industry noted in preceding pages.

The following table indicates the approximate value of rural holdings, and of machinery and live stock thereon, in each of the past ten years:—

At 30th June.	Value of Alienated Land and Improvements thereto.	Value of Farm Machinery and Implements.	Value of Livestock on Farms.*	Total.	Average Value of Alienated land per acre (as returned).	
					Unimproved.	Improved.
	£000.	£000.	£000.	£000.	£ s.	£ s.
1927 ...	319,500	16,000	56,100	391,600	1 14	4 13
1928 ...	341,500	17,000	71,000	429,500	1 14	4 16
1929 ...	353,100	17,200	62,000	432,300	1 14	4 18
1930 ...	353,700	17,000	44,800	415,500	1 14	4 17
1931 ...	343,600	16,400	45,500	405,500	1 13	4 13
1932† ...	332,200	14,800	45,600	392,600	1 13	4 12
1933† ...	322,500	14,000	40,000	376,500	1 13	4 9
1934† ...	320,100	13,700	59,000	392,800	1 13	4 8
1935† ...	318,800	13,500	44,100	376,400	1 12	4 6
1936† ...	324,700	14,400	60,600	399,700	1 10	4 2

\* Number as at 30th June or 31st March at prevailing market values.

† 31st March.

In addition, the unimproved value of Crown lands leased to landholders was estimated in 1930 to be in the vicinity of £60,000,000.

#### AGRICULTURAL AND PASTORAL LABOUR.

Particulars of persons above the age of 14 years permanently engaged in farm work on rural holdings one acre or more in extent are collected annually. They are classified according to status, and the amount of the salaries and wages paid to employees in receipt of remuneration is ascertained. Returns have been obtained since 1922-23 concerning wages paid to temporary hands employed by landholders during harvesting and shearing operations and for other casual work.

A detailed comparison of the number of persons engaged in farm work on rural holdings and of the amount of wages paid by landholders to permanent and casual employees in each of the last ten years is furnished in the appended tables. It is to be noted, however, that the

amount stated as the value of board and lodging, included as wages, is not carefully estimated. The amounts included under the heading of "Keep" have, therefore, been separately indicated in the table.

Year ended 30th June.	Owners, Lessees and Share Farmers.			Permanent Employees Receiving Wages.			Relatives not Receiving Wages.			Grand Total.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Number of Owners, etc., and Employees (in Thousands).												
1925-26	68.2	1.3	69.5	35.8	1.1	36.9	16.9	13.9	30.8	120.9	16.3	137.2
1926-27	67.7	1.4	69.1	35.2	1.1	36.3	17.1	11.7	28.8	120.0	14.2	134.2
1927-28	67.7	1.3	69.0	35.5	.8	36.3	17.5	11.4	28.9	120.7	13.5	134.2
1928-29	66.1	.9	67.0	34.2	.8	35.0	17.5	9.0	26.5	117.8	10.7	128.5
1929-30	65.3	.9	66.2	31.4	.8	32.2	19.7	8.1	27.8	116.4	9.8	126.2
1930-31	66.3	.9	67.2	27.0	.7	28.6	20.8	7.9	28.7	115.0	9.5	124.5
1931-32	67.0	.9	68.8	26.8	.5	27.3	22.1	7.2	29.3	116.8	8.6	125.4
1932-33*	70.8	.9	71.7	29.4	.4	29.8	21.7	7.0	28.7	121.9	8.3	130.2
1933-34*	70.6	.9	71.5	32.7	.5	33.2	20.9	6.4	27.3	124.2	7.8	132.0
1934-35*	69.4	1.0	70.4	36.7	.7	37.4	20.3	5.7	26.0	126.4	7.4	133.8
1935-36*	69.3	1.0	70.3	39.1	.7	39.8	18.7	5.4	24.1	127.1	7.1	134.2

\* Year ended 31st March.

Year ended 30th June.	Wages Paid to Permanent Employees.			Wages Paid to Casual Employees.			Total Wages Paid.					
	Males.	Females.	Total.	Males.	Females.	Total.	Including "Keep."			Value of "Keep."		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Permanent.	Casual.	Total.
Amount of Wages Paid (in Thousands of Pounds).												
1925-26	6,588	104	6,692	3,204	12	3,216	9,792	116	9,908	1,665	418	2,083
1926-27	6,746	121	6,867	3,423	17	3,440	10,169	138	10,307	1,661	400	2,061
1927-28	6,734	86	6,820	3,264	10	3,274	9,998	96	10,094	1,596	357	1,953
1928-29	6,475	74	6,549	3,041	9	3,050	9,516	83	9,599	1,510	330	1,849
1929-30	5,717	77	5,794	2,791	10	2,801	8,508	87	8,595	1,335	304	1,639
1930-31	3,396	37	3,433	1,923	6	1,929	5,310	43	5,362	1,163	265	1,428
1931-32*	4,145	40	4,185	2,102	10	2,112	6,247	50	6,297	1,121	262	1,383
1932-33*	4,292	36	4,328	2,362	16	2,378	6,654	52	6,706	1,197	288	1,485
1933-34*	4,655	39	4,694	2,514	12	2,526	7,169	51	7,220	1,321	291	1,612
1934-35*	5,119	60	5,169	2,650	3	2,662	7,778	53	7,831	1,451	305	1,756
1935-36*	5,534	49	5,583	3,043	3	3,046	8,577	52	8,629	1,556	353	1,909

\* Year ended 31st March.

The total amount of wages paid to permanent employees during the year 1935-36 was £4,027,495 in addition to board and lodging, etc., valued at £1,555,882, or a total of £5,583,377, the average remuneration, on the basis of these figures, being £142. per annum to males and £72 per annum to females, but the precision of these averages is affected by the greater or lesser degree with which the amounts returned as the value of board and lodging, etc., are accurately stated. The wages paid to casual employees amounted to £2,690,533 in addition to "keep" valued at £352,361.

The foregoing tables, read in conjunction with the table relating to share-farming appearing at page 530 of this Year Book, reveal some striking movements. Until 1930 there was a steady decline in the number of owners, lessees and share-farmers. During the depression there was a sharp reversal of this trend, so that in 1933 there were more persons of this class on rural holdings than at any time since 1925,

and over 5,000 more than in 1930. This was, in part, due to a return of absentee owners to holdings, while a consideration of the tables reveals the increase in share-farmers (involving a transference of formerly paid employees) as a major factor, and the subsequent slight decline of the number in this group has synchronised with a reduction in the number of share-farmers.

In the last decade there was a generally downward movement in the number of unpaid relatives assisting on rural holdings. These fell in number from 31,309 in 1925 to 26,502 in 1929. During the difficult years 1930 to 1932 there was a sharp increase to 29,274, but subsequently the downward trend was resumed, and in 1936 the number of unremunerated relatives had fallen to 24,077. It is notable that the female element in this class has declined uninterruptedly, and in 1936 numbered only 5,409 or about 61 per cent. fewer than in 1925. This observation is of application to female employment generally in the rural industries, but in lesser degree. About one-half the male and approximately 94 per cent. of the female relatives occupied on rural holdings and not receiving wages in 1935-36 were engaged on farms in the coastal divisions of the State where dairying is the principal rural activity.

A tendency for permanent employment in rural occupations to decline was greatly accentuated by the depression. Permanent employees receiving wages declined in number by about 3,000 between 1925 and 1929, and by over 7,500 in the next three years. Recovery since 1933 has been rapid, and in 1936 such employees were greater in number (39,790) than at any time previously, and almost 5 per cent. above the total in 1925. The number of male employees in 1935-36 (39,104) was 2,433 greater than in 1920-21 when hitherto rural male employment was greatest.

In 1930-31 farmers' disbursements in wages (including the value of "keep") fell to only slightly more than 50 per cent. of the total in 1926-27, but the farm wage bill has steadily increased in the last five years, and in 1935-36 was about 60 per cent. greater than in 1930-31. In making comparisons with years prior to 1930 allowance should be made for the lower level of the cost of living ruling since the depression.

It is clear that the partial and progressive recovery of the prices of primary products, with the sharp rise in wool values in 1933-34 and in 1935-36 as an outstanding feature, coupled with the reductions in costs of production which have accompanied adjustments in the rural economy, have increased the capacity of farmers to employ remunerated labour. Simultaneously, general economic recovery has opened avenues in other industries to persons formerly deriving mere subsistence from rural employment on the holdings of relatives.

#### RURAL FINANCE.

The problem of promoting effective rural settlement in New South Wales has been associated closely with that of rural finance. While comparatively few settlers have possessed sufficient capital to purchase land outright from the Crown, there has been a general desire to acquire a freehold tenure, neither private nor State tenancy having proved popular. Moreover, the proper development of rural holdings requires the investment of much capital for lengthy periods, and facilities for temporary financial accommodation, particularly during periods of drought.

The Land Act of 1861, aiming to encourage the settlement of an agricultural population beside the pastoral lessees, introduced "free selection before survey" and the sale of Crown land by deposit and instalments with

conditions as to residence, etc. By this means much more land was sold in the following twenty-three years than was sold at auction, and since 1889 alienation has been almost exclusively by this method of conditional purchase which is a method of selling Crown lands on terms. Beyond this little was done to provide financial aid for settlers until the end of the last century, when the agricultural and dairying industries were developing, and droughts were impeding settlement.

#### RURAL BANK OF NEW SOUTH WALES.

In 1899 an Advances to Settlers Board was appointed by the Government to make loans to farmers in necessitous circumstances or embarrassed by droughts. Advances were limited to £200 for a term of ten years at 4 per cent. interest. The scope of the Act was widened in 1902 when the Board was empowered to make advances to farmers for any approved purpose up to £500, repayable within thirty years.

In 1907 the functions of the Board were taken over by the Commissioners of the Government Savings Bank, and the limit of individual advances was raised to £2,000. By 1921, when the Rural Bank was established to carry on and extend the work, the outstanding advances amounted to £3,250,000, secured by mortgages from 7,000 borrowers. Particulars of the number and amount of advances are shown on page 697.

#### *Advances by the Rural Bank.*

The Rural Bank was established in 1921 as a department of the Government Savings Bank of New South Wales by the Government Savings Bank (Rural Bank) Act, 1920, under the control of three Commissioners who were empowered to continue on an extended basis the operations transacted previously by the Advance Department of the bank.

The primary object of the bank was to afford greater financial assistance to primary producers than is usually obtainable from other institutions, and thus to promote rural settlement and development.

Funds were obtained from deposits at current account, fixed deposits at current bank rates of interest and the issue of debentures and inscribed stock.

Loans were made only to persons engaged in primary production or in closely allied pursuits, and were either amortization loans or overdrafts on current accounts. The basis of lending generally adopted was two-thirds of the value of freehold land or certificated tenures under the Crown Lands Acts, or three-fourths of the value of improvements on uncertificated Crown tenures. Security was also taken over stock, plant, crops, wool, etc. The advances were made to repay existing encumbrances, to purchase land, to effect improvements or to utilise resources. By this means material assistance was afforded to both prospective and established settlers.

As from 1st October, 1931, the rate of interest on loans was reduced in terms of the Interest Reduction Act, 1931, and the Commissioners voluntarily reduced the rate to a maximum of 5 per cent. in December, 1932. Further reductions have since been made, and as from 1st April, 1935, the maximum rate became  $4\frac{1}{2}$  per cent. on overdraft and long-term loans, with a concession of  $\frac{1}{4}$  per cent. to co-operative societies. In June, 1937, the rate was  $4\frac{3}{4}$  per cent.

By the Commonwealth and State Banks Agreements Ratification Act, 1931, the Savings Bank business of the Government Savings Bank of New South Wales and the current account and fixed deposit business of the Rural Bank Department were transferred to the Commonwealth Bank of Australia. The loan business of the Rural Bank Department was continued as a State activity under the control of the Commissioners.

By Act No. 63 of 1932, the institution was changed in name to the Rural Bank of New South Wales and placed under a new Board of Commissioners, affording general banking facilities.

The following tables show the transactions in long term and overdraft loans by the Advance Department of the Government Savings Bank or the Rural Bank in various years since 1911.

*Long Term Loans.*

Year ended 30th June.	Advances made.			Balances repayable.		
	Number.	Total Amount.	Average.	Number.	Total Amount.	Average.
		£	£		£	£
1911 ... ..	838	331,693	395	3,754	1,074,359	286
1913 ... ..	1,386	771,272	556	5,094	2,051,132	403
1915 ... ..	860	387,715	451	5,860	2,514,078	429
1921 ... ..	1,365	813,525	596	7,242	3,423,871	473
1924 ... ..	1,081	888,479	822	9,766	5,526,744	566
1925 ... ..	603	587,508	974	9,749	5,721,678	587
1926 ... ..	265	444,065	1,676	9,252	5,661,868	612
1927 ... ..	332	598,879	1,804	8,933	5,783,775	648
1928 ... ..	305	437,195	1,430	8,676	5,759,409	664
1929 ... ..	685	807,550	1,179	8,609	5,951,427	691
1930 ... ..	581	703,425	1,211	8,743	6,272,685	718
1931 ... ..	78	84,675	1,086	8,686	6,166,523	710
1932 ... ..	27	24,860	920	8,488	5,966,586	703
1933 ... ..	47	21,565	458	8,414	5,863,458	697
1934 ... ..	51	47,838	938	8,198	5,634,603	687
1935 ... ..	100	115,115	1,151	7,926	5,905,865	745
1936 ... ..	134	171,130	1,277	7,624	5,779,603	758
1937 ... ..	47	81,179	1,727	6,587	5,492,789	834

*Overdrafts.*

Year ended 30th June.	Advances made during year.			Advances current at end of year.	
	Number.		Amount.	Number.	Amount.
	New.	Additional.			
1922 ... ..	1,383	...	£ 980,375	1,364	£ 728,584
1923 ... ..	1,565	356	794,499	2,743	1,381,113
1924 ... ..	1,827	521	1,081,335	4,205	2,144,333
1925 ... ..	1,710	511	1,196,280	5,291	2,830,914
1926 ... ..	1,746	675	1,342,692	6,277	3,618,596
1927 ... ..	2,115	994	1,996,925	7,402	4,746,220
1928 ... ..	2,192	1,273	2,231,790	8,527	6,098,405
1929 ... ..	2,225	1,462	2,012,505	9,424	6,938,040
1930 ... ..	1,970	1,895	1,992,785	10,691	7,988,275
1931 ... ..	811	534	486,505	10,650	8,254,745
1932 ... ..	144	99	112,332	9,566	7,857,288
1933 ... ..	196	785	170,908	9,349	7,704,117
1934 ... ..	366	1,532	437,912	9,272	7,758,946
1935 ... ..	714	807	768,648	9,535	8,093,698
1936 ... ..	966	753	1,388,212	9,920	8,783,166
1937 ... ..	873	655	1,201,126	10,049	9,006,533

*Advances to Settlers Agency.*

With the dual purpose of promoting increased employment in rural areas and stimulating rural production, advances of unemployment relief moneys were made by the Unemployment Relief Council through the Rural Industries Branch. From this fund an amount of £61,992 was advanced to settlers for permanent improvements during the year ended 30th June, 1931, £4,833 in 1931-32, and £212 during 1932-33.

Greater financial assistance was subsequently afforded to farmers and graziers from these moneys, the advances to settlers being administered by an "Advances to Settlers Co-ordination Board" and a "Dairy Promotion Board" set up by the Unemployment Relief Council, and the Farmers' Relief Board until 1st July, 1935. After that date administration of the financial activities of these Boards passed to the Rural Bank and with only slight variations in policy, is now dealt with in the Advances to Settlers Agency within the Government Agency Department of the Bank.

Advances for permanent improvements and the extermination of rabbits are granted by the Bank, limited to £300 in the case of permanent improvements and £500 (£400 of which might be used for wire netting) for rabbit extermination, and are repayable over periods up to fifteen years. Interest is at the rate of 3 per cent., and during the first two years no repayment of capital is required.

The Dairy Promotion Board was constituted with the object of providing funds for the relief of unemployment by the extension of dairying activities. Originally money was provided in respect of improvements, stock, and plant up to a total cost of £600, of which one-third was required to be provided by the applicant. The Council later amended the personal provision to one-fifth, retaining the limit of advance at £400. In the case of stock, plant, and sundries, the money is repayable over ten years; advances for improvements are to be liquidated in periods up to fifteen years, and in both cases interest is charged at the rate of 3 per cent., no repayments of principal being required during the first two years.

Late in 1934-35 the Council allocated a sum of £25,000 to provide advances through the Farmers' Relief Board for settlers under "Stay Orders" who were otherwise unable to secure financial assistance for the working of their farms.

A summary of the amounts loaned by these Boards and the Advances to Settlers Agency is furnished in the appended table. At 30th June, 1935, approval for 5,329 advances totalling £1,002,542 had been given, of which £900,997 had actually been advanced. In 1935-36 advances by the Advances to Settlers Agency numbering 499 for £80,766 were approved and in 1936-37 approval for loans was given in 228 cases involving £36,663.

Year ended 30th June.	Advances to Settlers Co- ordination Board.	Dairy Promotion Board.	Farmers' Relief Board.	Total.
Amounts Actually Advanced.*				
	Amount. £	Amount. £	Amount. £	Amount. £
1933 .....	350,496	388	.....	350,884
1934 .....	343,163	45,399	107	388,669
1935 .....	133,293	18,177	9,974	161,444
1936 .....	91,438	10,466	20	101,924
1937 .....	30,166	7,727	5	37,898
Total .....	948,556	82,157	10,106	1,040,819

\* Amounts actually debited.

*Rural Industries Agency.*

In 1915 certain schemes of limited scope were initiated by the Departments of Lands and Agriculture to assist farmers by loans to cultivate new areas and to relieve necessitous farmers. During the severe drought of 1919-20 a sum of £2,000,000 was made available by two special local loans to assist farmers whose ordinary commercial credit had been destroyed by the bad seasons.

The Rural Industries Board was formed on the 1st December, 1919—

- (a) to take over, consolidate, and collect all advances by the State for drought relief, seed wheat, and clearing land since 1915, and
- (b) to extend the scope of relief to necessitous farmers.

In 1923 the Board was dissolved and its functions were continued by the Rural Industries Branch of the Department of Agriculture. As from 1st July, 1935, the activities of the Rural Industries Branch were assumed by the Rural Bank of New South Wales in the Rural Industries Agency of that Bank.

A sum of £437,416 was advanced between 1915 and 1919 under schemes controlled by the Departments of Lands and Agriculture. Of this, £259,794 had been repaid or otherwise adjusted, and debit balances amounting to about £177,000 were taken over by the Board at the aforementioned date.

A summary of the operations of the Rural Industries Branch and subsequently, the Rural Industries Agency, is set out in the following table:—

Year ending 30th June.	Advances.	Interest charged on Ad- vances.	Repayments.		Bad Debts written off.	Balances due (ap- prox.).	No. of Debtors.
			Principal.	Interest.			
1 Dec., 1919, to 30 June, 1922	£ 2,152,390*	£ 105,666	£ 1,817,792	£ 92,848	£ †	£ 317,416	†
1923	159,443	24,639	80,517	12,239	4,812	433,930	†
1924	237,414	32,015	118,673	16,859	1,634	566,193	†
1926	151,788	22,222	242,020	18,565	14,533	379,957	3,485
1931	664,202	57,783	305,531	51,419	4,992	1,309,486	5,200
1932	242,005	66,934	352,857	69,490	560	1,196,602	5,000
1933	233,571	78,771	212,929	65,886	25,635	1,204,494	4,300
1934	118,370	38,477	43,679	14,268	42,694	1,260,664	4,216
1935	52,771	60,906	67,659	14,445	88,486	1,203,741	4,250
1936	51,382	34,000	45,661	9,781	120,687	1,119,387	3,138
1937	58,873	31,851	54,486	14,229	89,548	1,051,909	2,578
Total...	6,754,815	671,637	4,445,352	494,751	440,884	...	...

\* Including balances taken over from other Departments (£177,000) and Cash Sales from stocks to persons other than necessitous farmers (£277,000). † Not available.

Originally wheat-growers only were assisted, but, in 1920, advances were made also to dairy-farmers and small graziers. More recently the scope of operations has been extended to include farmers of considerable variety whose circumstances prevented them from obtaining assistance through usual commercial channels; thus on a relatively small scale assistance has been granted to orchardists, tobacco growers, rice growers, farmers suffering loss from floods, fire and grass-hopper pests, pig farmers who sustained the loss of their herds as the result of an outbreak of swine fever, etc.

Most of the advances, however, were made to wheat-farmers, and the assistance granted was usually in the form of orders issued upon suppliers of the commodities required, *i.e.*, fodder, seed wheat, fertiliser, tractor fuel, household supplies, and so on. Payment was made direct to suppliers, who rendered their accounts to the Branch accompanied by the farmer's acknowledgment of receipt of the goods. Cash advances were made only in

exceptional circumstances, but now that the Government Agency Department of the Rural Bank is charged with making the advances, cash payment thereof is the ruling method. In October, 1932, the sum of £50,000 was set aside to assist land-holders to procure flock rams, bulls and boars from registered breeders to improve their stock, £25,000 being set aside for rams, £20,000 for bulls, and £5,000 for boars. Up to the 30th June, 1937, advances totalling £18,440 had been made, and the amounts actually provided were £15,328 for rams, £2,997 for bulls, and £115 for boars.

Until recent years advances were made in cash at the rate of 5s. per acre on newly fallowed land. The object of this form of advance was to encourage better farming methods, and consequently operations were not confined to necessitous farmers only. The advantages of fallowing are now fully recognised throughout the State, and the desired results having been achieved, fallowing assistance is granted only to necessitous farmers on the lines of general assistance.

Interest on advances was formerly at the rate of 6 per cent., with an additional 1 per cent. on overdue accounts until 30th June, 1925. It was reduced to 5½ per cent. from 1st February, 1932, and to 4 per cent. as from 1st January, 1933.

Security taken for the advances consists mainly of crop liens and promissory notes, as in the majority of cases farmers receiving assistance lack the means of furnishing more tangible security which would enable them to obtain accommodation from ordinary financial institutions. Having regard to the somewhat hazardous nature of security taken, the number of bad debts incurred has been relatively small.

Both the Federal and State Governments accorded financial assistance to wheat-growers in the seasons 1931-32 to 1935-36, funds for which were provided partly by a tax on flour, first under the State Flour Acquisition Act, and from 3rd December, 1933, under the Commonwealth Flour Tax Assessment Acts of 1933, 1934, and 1935. Information concerning assistance to wheat-growers and the provision of funds for that purpose is shown in the chapter, "Agriculture," of this Year Book, at page 558.

#### *Government Guarantee Agency.*

Under the Advances to Settlers (Government Guarantee) Act, passed towards the end of December, 1929, a Government Guarantee Board was constituted with power to guarantee to the banks repayment of advances made to settlers. The Board consisted of the Minister for Agriculture (as Chairman), the Colonial Treasurer, and the Officer-in-Charge of the Rural Industries Branch. The amount which might be guaranteed in respect of any one settler could not exceed £3,000, or in the case of a co-operative society registered under the provisions of the Co-operation Act £25,000. The amount which might be guaranteed by the Board in any one year was £2,500,000. New guarantees were given by the Board only during the period for two years commencing on 23rd December, 1929, but guarantees given during that period might be continued for such time as might be approved. By an amending Act of 1934 new guarantees might be given supplementing subsisting guarantees to a limit of one-fourth of the contingent liability already assumed.

As from 1st July, 1935, the functions of the Board were transferred to the Government Guarantees Agency of the Rural Bank of New South Wales, and the Government Guarantee Board was dissolved.

Activities under these provisions have been negligible in recent years. The contingent liability at 30th June, 1937 exceeded £300,000.

*Irrigation Agency.*

With the dual object of exploiting the natural resources of the State and simultaneously extending facilities for the settlement of additional rural producers on the land, the Government entered upon a scheme of irrigation in connection with the Murrumbidgee River (in 1906). The first farms were made available in 1912, and at 31st March, 1936, the number of holdings was 1,368, with an area of 304,134 acres, inclusive of certain attached lands outside the irrigation area. Here settlers have been assisted by advances and by the provision of factories to handle their products.

The Government also undertakes to finance the construction of shallow bores, sunk either by its own or privately-owned plants, allowing the settlers extended terms of repayment of from five to ten years. Further, works for water supply for stock and domestic purposes and in certain cases for irrigation are provided, and bore trusts and water trusts are constituted, under which the cost of the works is repaid over a period of years (in most cases twenty-eight years) by the landholders benefiting. Further particulars of the finance provided in connection with irrigation projects are shown on pages 586 to 592 and 750 of this Year Book.

The financial relationship of settlers on the irrigation areas with the Crown in respect of land payments, water rates, and charges, and also advances to settlers, previously a function of the Water Conservation and Irrigation Commission, is now being administered by the Rural Bank through the Irrigation Agency. All debts owing to the Commission on the date of commencement of the Agency in respect of shallow bores were transferred to the Bank. The Water Conservation and Irrigation Commission, however, continues to attend to all matters in relation to the technical and engineering features associated with water conservation and distribution, and to the lands administration in respect of the irrigation areas. It also carries out the actual sinking of shallow bores, although the debts incurred in respect of these bores are transferred to the Bank for collection through its Irrigation Agency.

## THE FARMERS' RELIEF ACT, 1932-35.

The Farmers' Relief Act came into operation on 17th February, 1933, to provide assistance and relief for necessitous farmers, to prevent the possible failure of the farmer, and to afford him, by conservation of his assets, an opportunity of recovering his financial position.

As from 1st July, 1935, the financial activities of the Board were brought under the Rural Bank of New South Wales in the Farmers' Relief Agency of the bank.

The provisions of the Act and the manner of affording relief were given in some detail at pages 587 to 590 of the Official Year Book, 1934-35. Briefly the legislation provided for the constitution of a Farmers' Relief Board empowered to grant "stay orders" for the protection of the farmer. Issue of a stay order suspended legal action for enforcement of mortgage covenants, agreements of sale, etc., and protected the farmer from bankruptcy proceedings. Liabilities of the farmer were classified by the Board. Secured liabilities not represented by assets and unsecured debts were placed in a suspense account and accrued no interest during the period of the stay order. On unsuspended secured liabilities the maximum rate of interest was fixed by the Act at 5 per cent. per annum.

A stay order might be removed by the Board at any time in its discretion, but normally endures for three years and may be extended from year to year for a maximum additional three years.

Particulars regarding the constitution of the Board, the method of conducting the farmers' financial affairs through supervisors appointed

by the Board, the priority of claims on income from the farm and provisions for financial assistance for the working of the farm will be found in earlier editions of this Year Book. The time within which applications for stay orders might be made was several times extended and now expires on 1st July, 1938.

### *Debt Adjustment.*

With the object of promoting the permanent rehabilitation of the finances of farmers, the Federal Parliament passed legislation in April, 1935, making provision for a loan of £12,000,000 from which advances might be made to facilitate compositions with creditors, who, for a return in cash of a proportion of their capital in jeopardy, would agree to adjustment of farmers' debts on an equitable basis in the light of existing circumstances. The States, through their farmers' relief agencies, were made the authorities to administer the scheme. No payment under a composition or scheme of arrangement may be made in respect of any debt due to the Commonwealth, a State, or any governmental authority. An initial allocation of £10,000,000 of the amount authorised under the Loan (Farmers' Debt Adjustment) Act, 1935, was made between the various States, including £3,450,000 for New South Wales, with the provision that the remaining £2,000,000 should be apportioned on a similar basis or in such other manner as, from experience in the working of the scheme, might appear necessary to satisfy the financial requirements of the several States in that relation.

The New South Wales Farmers' Relief Act has been amended to enable the Board to make advances (with interest at a rate not exceeding 2½ per cent. per annum) to farmers out of moneys provided by the Commonwealth under the Federal Loan (Farmers' Debt Adjustment) Act, 1935, for the purposes indicated. Advances may be made by the Farmers' Relief Board in any case where, in the opinion of the Board, some discharge of the farmers' debts is necessary to ensure that he will continue farming operations with reasonable prospects of success, and provided the Board is satisfied that if the composition proposed is effected the farmer will probably be able to carry on successfully.

Up to 30th September, 1937, advances for debt adjustment actually paid totalled £580,465 and as a result, farmers debts were written down by creditors to the extent of £254,954. At that date the Board was committed to make additional advances for debt adjustment totalling £619,188 inclusive of an amount of £448,000 in respect of which negotiations between the Board and creditors were still proceeding.

### *Operation of the Act.*

The period determined by the Act within which applications for stay orders might be lodged closed on 30th June, 1937 (subsequently extended), and up to that date 3,522 applications for stay orders had been lodged. As at 30th June, 1937, stay orders had been granted to 2,445 farmers, 1,031 applications had been refused, withdrawn or otherwise determined, and 46 applications were still under consideration. In respect of 2,278 cases in which assessments had been made by the Board under the provisions of the Act up to 30th September, 1937, assets were valued at £10,589,940 and liabilities at 11,720,543 at the time of the granting of the stay orders. Of the liabilities £8,522,386 represented unsuspended secured liabilities, £1,677,258 suspended liabilities and £1,520,899 unsecured debts. From the date on which the Act came into operation up to 30th June, 1937, the Board had approved of advances to farmers for maintenance, carry-on and capital purposes totalling £2,195,102.

## SUMMARY OF INDEBTEDNESS TO THE CROWN.\*

In the appended table the outstanding indebtedness of landholders to certain Governmental lending agencies in New South Wales has been brought together. The figures include balance of payments due by settlers on land acquired under Closer Settlement schemes, but exclude residual balances owing in respect of former Crown lands sold to settlers by instalments (under conditional purchase, etc.) Contingent liabilities assumed by the Government Guarantees Board are also excluded from the table.

It should be noted that it is not possible, from the appended figures, to make an inference as to the extent to which settlers, by their own efforts, have been able to improve their position. For example, whilst advances to settlers through the Water Conservation and Irrigation Commission showed material reduction in 1935, that movement was a result mainly of the writing down of debts under provisions as indicated at page 750 of this Year Book. Similarly, the reduction of indebtedness to the Closer Settlement Fund since 1932 is, as to a large part, due to the reappraisal of land values.

Between 1925 and 1930 there was a very marked increase in rural borrowing from governmental agencies. The poor season of 1929-30 was responsible for a sharp rise in settlers capital obligations, indebtedness to the Rural Bank and the Rural Industries Branch increasing by £1,745,000 in that year. In 1930-31 there was a further increase, and thereafter indebtedness to these two agencies showed a slowly declining trend until 1934-35. There was an appreciable reduction of amounts outstanding on long term loans, wire netting advances and advances from relief funds in 1935-36 and 1936-37 and concurrently a considerable increase in loans secured on overdraft.

## Outstanding Indebtedness of Settlers to Certain Government Agencies in New South Wales.

Government Agency.	Outstanding as at 30th June—					
	1925.	1933.	1934.	1935.	1936.	1937.
Rural Bank—Loans and Overdrafts	£ 8,552,592	£ 13,567,575	£ 13,393,540	£ 13,999,563	£ 14,562,768	£ 14,499,322
Closer Settlement Fund (including Returned Soldier Settlements) ...	*	15,128,615	15,072,178	14,150,021	14,622,608	14,195,754
Irrigation Commission—						
Advances to Settlers † ...	2,141,648	1,067,196	1,060,512	863,161	1,387,708	1,487,502
Advances for Shallow Bores ...	134,195	253,903	249,277	247,336	260,837	253,128
Rural Industries Branch—						
Advances to Neccessitous Farmers	481,065	1,204,494	1,260,064	1,203,741	1,119,387	1,051,909
Department of Lands—Wire Netting Advances ...	278,463	462,335	495,543	504,918	494,627	465,436
Unemployment Relief Council—						
Advances by A.S.C. Board, D.P. Board, and F.R. Board ...	...	354,598	722,742	836,751	970,953	920,080
Farmers' Relief Board § ...	...	48,714	303,882	588,685	700,461	968,310
Total of foregoing ...	*	32,082,930	32,558,347	32,394,176	34,119,349	33,841,443

\* Not available.

† Includes debts postponed to end of term of purchase free of interest, estimated at approximately £2,000,000.

‡ Murrumbidgee Irrigation Area only to 1935; all Irrigation districts thereafter.

§ Include debts adjustment advances.

As from 1st July, 1935, all the State Government agencies affording financial assistance to primary producers were brought under the administration of the Rural Bank of New South Wales in the various sections of the Agency Department constituted under the Rural Bank (Agency) Act, 1934.

\* For purposes of this summary the Rural Bank has been included as a Government agency.

*Other Advances to Settlers.*

Particulars of the number and amount of registered loans made on the security of livestock, wool, and growing crops are published in the Chapter "Private Finance" of this Year Book. These include advances made on such security by Government agencies as well as by private institutions and individuals.

In 1901 a closer settlement policy was introduced by the Government with a view to acquiring and subdividing large estates and leases suitable for closer settlement. Operations under this scheme commenced actively in 1905. The outstanding indebtedness of settlers in respect of funds provided for this form of settlement is shown in the preceding table, and a summary of the operations under the various schemes may be found in the chapter, "Land Legislation and Settlement."

In the Commonwealth Bank of Australia a rural credit department was established in October, 1925, to assist the marketing of the products of the rural industries. For this purpose advances for a period not exceeding one year may be made to banks, co-operative associations, etc., and bills secured on primary produce may be discounted on behalf of these institutions. Further particulars regarding the department are shown in the chapter "Private Finance" of this Year Book.

The Governments of the State and of the Commonwealth have provided assistance to settlers to enable them to construct fencing to protect their holdings from the ravages of rabbits and wild dogs. Details are published in the chapter of this volume entitled "Pastoral Industry." Funds for scientific research and practice in connection with rural activities have been provided from both public and private sources as indicated under appropriate headings throughout this Part.

*Rates of Interest Charged on Rural Loans, &c.*

The cost of borrowing is obviously of great importance in determining the profitability of rural activities having regard to the necessity of providing much capital, both for the acquisition of land and for temporary accommodation between seasons and during periods of low returns owing to adverse seasonal conditions. In the appended table the course of rates of interest charged on rural loans through various Governmental agencies and from some private sources is shown, though not necessarily the actual dates of changes in rates:—

Date.	Government Agencies.*							Trading Banks Over-draft Rates.	Weighted Average Rate on Rural Mortgages†
	Rural Bank.	Advances to Settlers Agency.†	Rural Industries Agency.	Irrigation Agency.		Farmers' Relief Agency.			
	Over-drafts and Loans.			Advances to Settlers.	Pore Advances.	Carry-on Advances Account.	For Debt Adjust-ment.		
Rate of Interest—per cent. per annum.									
June, 1929 ...	6½§	...	6	6½	5½	...	...	7 to 8½	...
December, 1932...	6½	...	5½	6	5½	...	...	5 to 6	5·5**
October, 1934 ...	4½	...	4	4	4	4	...	4½ to 5	5·0
April, 1935 ...	4½¶	3	4	4	4	4	...	4½ to 5	4·7
June, 1936 ...	4½¶	3	4	4	4	4	2½	4½ to 5½	4·9
June, 1937 ...	4½¶	3	4	4	4	4	2½	4½ to 5½	4·9

As now existing or their predecessors, including Rural Bank as such. † Loans from Unemployment Relief Funds. ‡ By other than Government or Banks—three months moving average. § On overdrafts. || On loans. ¶ ½ per cent. less to co-operative societies.

\*\* October, 1933.

Prior to the depression high rates of interest were matched by relatively high rural incomes. But with the sharp fall in prices of all rural products it became impossible for a large proportion of rural debtors to fully meet debtor obligations. The extent to which the Government has been able to reduce the burden of capital charges where the Crown was the creditor is revealed by the table. In addition, all interest charges accruing under the Crown Lands Acts were reduced by  $22\frac{1}{2}$  per cent. (as well as rentals), and, as shown in the chapter, "Land Legislation and Settlement," many settlers had capital indebtedness in respect of lands in course of purchase from the Crown greatly reduced under reappraisal provisions created under amendments of the Land laws, enacted to afford financial relief to settlers.

There is, of course, a large body of rural indebtedness other than to Government agencies, but on this there has also been a material decline in interest charges. Under the Interest Reduction Act, all interest charges on private debts were reduced by  $22\frac{1}{2}$  per cent. (with certain reservations) as described in the chapter, "Private Finance," of this Year Book. Overdraft rates of private banks, which ranged from 7 to  $8\frac{1}{2}$  per cent. in March, 1930, were reduced to  $4\frac{1}{2}$  to 5 per cent. by July, 1934. Apart from operations under the debt adjustment provisions of the Farmers' Relief Act, it has been possible to arrange for the re-finance of mortgages at rates effecting considerable savings in interest charges. Prior to the depression the popular rate for first mortgages was probably about 7 per cent. per annum, but during the last three years the average rate on first mortgages with rural securities was less than 5 per cent. per annum.

A consideration of the table and the supplementary information supplied in the succeeding paragraphs indicates that over the past four years very substantial adjustments of capital charges have been effected, leading to material reduction of the obligation of the farmer *qua* debtor. As a result, costs of production have been lowered, and the farmer has been placed in a position to regain his financial status as higher prices and normal seasonal conditions have promoted an upward trend of rural incomes.

## LAND LEGISLATION AND SETTLEMENT.

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### AREA OF NEW SOUTH WALES.

THE area of New South Wales, including Lord Howe Island (5 square miles) and the Federal Capital Territory (about 940 square miles), as stated on a previous page is estimated at 310,372 square miles, or 198,638,080 acres, being a little over two and a half times the combined area of Great Britain and Ireland. Excluding the surface covered by rivers and lakes, etc. (2,969,080 acres), the land area within the boundaries of the State is 195,669,000 acres, or about 305,733 square miles. The formal transfer on 1st January, 1911, of 583,680 acres at Yass-Canberra, and of 17,920 acres at Jervis Bay in 1915, to the Commonwealth Government as Federal Capital Territory, reduced the land surface of the State to 195,067,400 acres.

### LAND ADMINISTRATION.

At the foundation of the Colony in 1788, the whole of the lands of the State vested in the British Crown.

The administration of public lands passed entirely under local control by virtue of the Constitution Act on the establishment of responsible government in 1856. Since that year the administration has been directed by a Secretary for Lands, who is a member of the State Parliament and of Cabinet. A Department of Lands was created and a permanent Under-Secretary appointed, with defined powers subordinate to those of the Minister. This system of administration may be described as political control through a permanent salaried staff. Control of the lands of the Western Division is vested in a commissioner and a system of local land boards has been established similar to that obtaining in the other divisions of the State.

Broadly, the laws of the State in relation to the occupation of Crown lands are designed to facilitate settlers securing lands under a freehold title, and with this end in view various forms of tenure leading to alienation have been provided. Under an instalment purchase system, ultimate possession of lands in fee simple has been rendered possible even in the case of settlers with limited initial capital. The principle of assured possession is seen in the right of conversion attaching to the more important leaseholds and has been further recognised in recent legislation providing for the conversion to leases in perpetuity (without abrogating existing rights of instalment purchase) of the principal tenures hitherto subsisting for fixed terms.

The aim for many years has been so to dispose of the Crown estate that the settler obtains sufficient, but not substantially more than sufficient land to support himself and his family; hence the prominence of the "home maintenance area" provision in the land legislation. Restrictions upon the transfer (except by way of mortgage) of lands in the course of purchase, or held under lease from the Crown, are designed to prevent the aggregation of holdings in defeat of these objects.

To assist the Crown settlers in meeting the difficulties arising from the world-wide agricultural depression, specific land legislation—apart from that applying to rural producers generally—has been enacted. Provision

has been made for the redetermination of capital value or rental value of all of the substantial forms of holdings on the application of the purchaser or the lessee, and the resulting changes in indebtedness or rent liability are indicated on pages 718, 742 and 750. In addition, all rents and interest charges were reduced by  $22\frac{1}{2}$  per cent. for three years, from 1st January, 1933, and the period was extended for a further three years by the Crown Lands (Amendment) Act, 1935; also provision was made for the funding of arrears and the postponement of instalments or interest on outstanding indebtedness in cases where the settlers' circumstances justify such a course.

The Eastern and Central Divisions are subdivided into ninety-one Land Districts, in each of which is stationed a Crown Land Agent, whose duty is to receive applications and furnish information regarding Crown lands. Groups of these districts are arranged in Land Board Districts, each of which is under the control of a District Surveyor. Land Boards are appointed for each Land District. These Boards comprise an official chairman and two local members, sit in open court, and determine many matters under the Land and other Acts. There are special Land Board Districts for the Yanco, Mirrool, and Coomealla Irrigation Areas.

#### *Land and Valuation Court.\**

A Land and Valuation Court, whose awards and judgments have the same force as those of the Supreme Court, was constituted in 1921 in continuance of the Land Appeal Court. To this Court are referred appeals, references, and a number of other matters under the Crown Lands Acts, the Pastures Protection Act, the Closer Settlement Acts, the Water Act, the Public Roads Act, and certain other Acts.

#### *Territorial Divisions.*

The State is divided, for administrative purposes, into three territorial Divisions—Eastern, Central, and Western—the boundary lines running approximately north and south, as shown on the map in the frontispiece. The conditions governing alienation and occupation of Crown Lands vary in each division.

The Eastern Division, with an area of 60,661,926 acres (exclusive of 601,600 acres of Commonwealth territory), includes the broad belt of land between the sea-coast and a line nearly parallel to it, and so embraces the coastal districts of the State, as well as the tablelands. It contains excellent agricultural land, and includes the original centres of settlement most accessible to the markets of the State.

The Central Division, with an area of 57,055,846 acres, extends north and south between the western limit of the Eastern Division and a line drawn along the Macintyre and Darling Rivers, Marra Creek, the Bogan River, across to the River Lachlan, along that river and the Murrumbidgee River to Balranald, and thence to the junction of the Edward River with the Murray. The area thus defined contains the eastern part of the upper basin of the Darling River in the northern part of the State, and the basins of the Lachlan, the Murrumbidgee, and other affluents of the Murray in the southern portions. Land in this division is devoted mainly to pastoral pursuits, but about 3,000,000 acres are cultivated for wheat in a normal season.

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\* Further particulars of Local Land Boards, and of the Land and Valuation Court, are published in the chapter "Law Courts" of this Year Book.

The Western Division is situated between the western limit of the Central Division and the South Australian border. It contains an area of 80,318,708 acres, watered by the Darling River and its tributaries, and is mainly devoted to pastoral pursuits. Water conservation and irrigation, and railway and other means of communication may ultimately make agriculture possible in parts of this large area. However, legislation in regard to the occupation of the lands of the district is based upon the assumption that for many years to come there will be little inducement for agricultural settlement in the major part of the Division.

#### DISPOSAL OF LANDS OF NEW SOUTH WALES.

The following table provides a brief summary of the manner in which the lands of the State were held as at 30th June, 1936, distinguishing lands in the Western Division from the remainder of the State:—

Manner of Disposal.*	Area.		
	Eastern and Central Divisions.	Western Division.	Whole State.
	acres.	acres.	acres.
(1) Absolutely alienated ... ..	60,306,899	2,035,138	46,204,453†
(2) In course of alienation ... ..	1,601,878	1,119	22,137,584
(3) Virtually alienated ... ..	26,362,347	94,935	1,602,997
(4) Alienable Leases (long term and perpetual) ...	1,468,275	100,552	26,457,282
(5) Long term leases with limited rights of alienation...			1,568,827
Total under foregoing tenures ... ..	95,739,399	2,231,744	97,971,143†
(6) Other long term leases ... ..	885	74,993,875†	74,994,760†
(7) Short leases and temporary tenures ... ..	3,642,311	2,702,287	6,344,598
(8) Forest leases or permits within dedicated State forests ... ..	2,005,724	...	2,005,724
(9) Mining leases and permits ... ..	174,237	4,631	178,838
(10) Neither alienated nor leased (includes reserves, dedicated State forest not under occupation, roads, stock routes, etc.) ... ..	16,155,216	386,201	16,541,417
Total Area... ..	117,717,772	80,318,708	198,036,480

\* Tenures included in (3) to (9) are indicated in table on page 713.

† Inclusive of lands dedicated for public and religious purposes, viz., 261,452 acres in the whole State, the divisions of which cannot be stated.

‡ Includes Perpetual Leases held under the Western Lands Act, 31,384,173 acres.

Particulars of the areas under, and the conditions attaching to, each of these tenures are given on later pages.

In considering the matter of lands remaining within the disposal of the State for new settlement, it is important to note that the Eastern and Central land divisions embrace practically the whole of the lands in the State which receive an average annual rainfall of 15 inches or more, and that the rainfall in the Western Division ranges from that average down to 8 inches in the extreme north-west. This circumstance places important limitations upon the utility of the land in the Western Division, and practically none, except small irrigation settlements at Curlwaa and Coomealla, is utilised for agricultural purposes. It is sparsely occupied, being held in large pastoral holdings lightly stocked.

The total area of land embraced within freeholds, purchases by deferred payments, and leases alienable wholly or in part at 30th June, 1936, was 97,971,143 acres, and, of this area, 95,739,399 acres were in the Eastern and Central land divisions. By reason of the indefinite nature

of the conditions governing the conversion of leases to freehold tenures, and to leases in perpetuity, it is not possible to ascertain accurately how much of the lands embraced in this area will not revert to the disposal of the Crown. Assuming, however, that one-half of the areas remaining under long term leases with limited rights of alienation fulfil conditions requisite for conversion into tenures leading to freehold, it is estimated that the area of former Crown lands in the Eastern and Central Divisions placed definitely beyond State control is in the vicinity of 95,000,000 acres, and probably it is appreciably more. Of the remaining area of about 23,000,000 acres in the Eastern and Central Divisions, 885 acres are held under long leases, with no rights of conversion, 5,822,272 acres are held under short lease and temporary tenures, and the balance is land which is neither alienated nor leased and includes dedicated State forests not under lease, commons, roads, stock routes, inferior Crown lands not under any tenure and the beds of rivers and lakes.

Of land in the Western Division 2,035,138 acres are alienated or in the process of alienation and so have passed permanently beyond State control. Perpetual leases with no right of alienation account for 31,384,173 acres and long term leases, most of which are convertible to leases in perpetuity for 43,609,702 acres. Alienable leases and leases with limited right of alienation cover an aggregate area of 195,487 acres and short term leases, temporary tenures, mining leases and permits, 2,706,888 acres. The balance of 387,320 acres, with the exception of homestead grants of 1,119 acres, is neither alienated nor leased and consists of unalienated town lands, commonages, etc.

It has been estimated that the area of land in the State unfit for occupation of any sort does not exceed 5,000,000 acres.

#### *Alienation Prior to 1861.*

From the early days of settlement until the year 1861 the Crown disposed of land, under prescribed conditions, by grants and by sales, so alienating, by the end of 1861, an aggregate area of 7,146,579 acres, made up as follows:—

	acres.
1. By grants, and sales by private tender to the close of 1831 ... ..	3,906,327
2. By grants in virtue of promises of early Governors made prior to 1831, from 1832-40 inclusive ... ..	171,071
3. By sales at auction, at 5s., 7s. 6d., and 10s. per acre, from 1832-38 inclusive ... ..	1,450,508
4. By sales at auction, at 12s. and upwards per acre, at Governor's discretion, from 1839-41 inclusive ... ..	371,447
5. By sales at auction, at 20s. per acre, from 1842-46 inclusive ... ..	20,250
6. By sales at auction and in respect of pre-emptive rights, from 1847-61 inclusive ... ..	1,219,375
7. By grants for public purposes, grants in virtue of promises of Governors made prior to the year 1831, and grants in exchange for lands resumed from 1841-61 inclusive ... ..	7,601

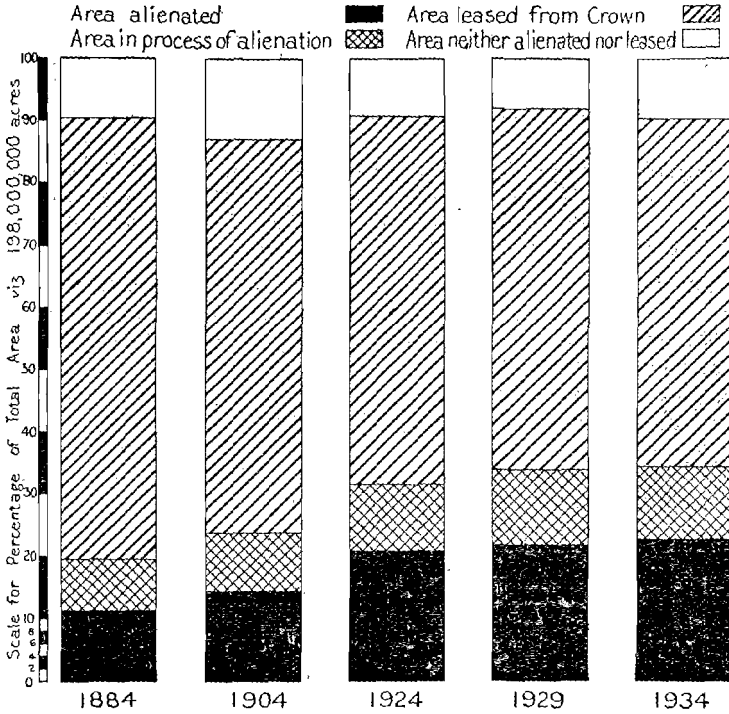
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Total area absolutely alienated as to 31st December, 1861 ... 7,146,579

The first Crown Lands Act was passed in 1861, and alienation has since been controlled by the laws of the State.

*Progress of Alienation.*

The following graph shows the progress of alienation at various dates since 1884.

**LAND TENURE SINCE 1884**

*The differently shaded portions of the Graph represent the percentage of the total area of New South Wales which was alienated, in process of alienation under systems of deferred payments, and held under lease from the Crown.*

A brief account of the spread of settlement appears on page 679 of the Year Book for 1928-29. Particulars are given below, at intervals since 1861, of the total area of freehold land resumed for closer settlement and for water conservation and irrigation purposes and of the total area of absolutely alienated land. The Federal Territory at Canberra was ceded to the Commonwealth on 1st January, 1911, and alienated land contained therein of an aggregate area of 173,451 acres has accordingly been excluded from the particulars for 1911 and following years.

As at 30th June.	Area of freehold resumed for re-settlement.	Area remaining absolutely alienated.	As at 30th June.	†Area of freehold resumed for re-settlement.	Area remaining absolutely alienated.	As at 30th June.	†Area of freehold resumed for re-settlement.	Area remaining absolutely alienated.
	acres.	acres.		acres.	acres.		acres.	acres.
1861*	...	7,146,579	1921	1,857,216	39,679,986	1931	2,406,035	44,074,823
1871*	...	8,630,604	1926	2,329,217	42,323,857	1932	2,406,898	44,362,013
1881*	...	19,615,299	1927	2,333,082	42,779,522	1933	2,407,198	44,682,820
1891*	...	23,682,516	1928	2,334,675	43,184,213	1934	2,411,998	45,136,328
1901*	...	26,407,376	1929	2,350,746	43,491,964	1935	2,412,798	45,698,269
1911	† 605,641	36,234,256	1930	2,405,635	43,750,361	1936	2,413,598	46,204,453

\* As at 31st December.

† Does not include alienated lands within Federal Capital Territory, 173,451 acres.

The principal method of alienation is by conditional purchase, which was introduced in 1861. Lands sold by this means are not included as alienated until all payments have been made and deeds have been issued. For this reason the influence of the introduction of conditional purchases does not appear appreciable in the table until 1881. Lands upon which all payments have been made and all conditions of alienation fulfilled but for which no deeds have been issued are included under conditional purchase in course of alienation. Land so held is appreciable in extent.

The following table shows the areas of land alienated in New South Wales by each of the principal methods up to 30th June, 1936, and the area re-acquired for purposes of irrigation and closer settlement:—

Manner of Disposal.	Area. At 30th June, 1936. acres.
Granted and sold by private tender and public auction prior to 1862 .. .. .	7,146,579
Sold by auction, after auction, and under deferred payment sales since 1862 .. .. .	11,594,533
Sold by improvement and Special Purchases .. .. .	2,868,608
Sold by Conditional Purchase since 1862 (deeds issued) .. .. .	26,149,990
Granted under Volunteer Land Regulations of 1867 .. .. .	172,198
Dedicated for public and religious purposes since 1862 .. .. .	261,452
Sold under Closer Settlement Acts (acquired and Crown Lands) .. .. .	46,989
Suburban Holding Purchase .. .. .	9,311
Soldiers' Group Purchase .. .. .	1,519
Returned Soldiers' Special Purchases (deeds issued) .. .. .	2,060
Week-end Lease Purchases (deeds issued) .. .. .	498
Town Lands Lease Purchases (deeds issued) .. .. .	31
Irrigation Farm Purchases .. .. .	91
Sold by all other forms of sale .. .. .	537,643
Total .. .. .	48,791,502*
Less—	acres.
Freehold land purchased for Closer Settlement .. .. .	2,193,798
Freehold land purchased for Irrigation Settlements .. .. .	219,800
Lands alienated in Federal Capital Territory prior to its transfer to the Commonwealth .. .. .	173,451
	<u>2,587,049</u>
Land absolutely alienated as at 30th June, 1936 ....	46,204,453

\* Inclusive of area alienated within Federal Territory prior to 1911.

To this should be added the areas held under Homestead Selection and Homestead Grant, which are not wholly alienated from the Crown, but are, to all intents and purposes, regarded as in the settled and unrestricted possession of the holders and their successors. A homestead grant is a freehold title (rent payable being a quit rent only), and a homestead selection is regarded as in course of alienation. The area held under each tenure cannot be stated separately, but the total area so held on 30th June, 1936, was 1,602,997 acres.

As has already been pointed out, there was, in addition, a considerable area of land under conditional purchase which awaited only the formality of the issue of deeds to complete its alienation. This area is included in the following statement showing the areas in course of alienation by each of the principal methods as at 30th June, 1936:—

Manner of Disposal.	Area. At 30th June, 1936. acres.
By Conditional Purchase .. .. .	18,815,531
Under Closer Settlement Acts .. .. .	2,824,278
As Group Settlement Purchases .. .. .	412,887
As Suburban Holdings approved for purchase .. .. .	11,264
As Returned Soldiers' Special Holdings approved for purchase .. .. .	9,204
As Week-end Leases approved for purchase .. .. .	214
Irrigation Lands Purchases .. .. .	64,206
Total area in course of alienation at 30th June, 1936 ..	22,137,584

The area of land shown above under the heading of settlement purchases relates to lands made available under the closer settlement policy inaugurated in 1904, which provided for the re-purchase of freehold lands and the resumption of certain leases, with compensation. These, with certain adjacent Crown lands, were made available for purchase on easy terms in home maintenance areas for settlers of small means. In 1916-17 the policy of providing land for returned soldiers was introduced, and led to a considerable expansion of closer settlement operations. Information respecting the disposal of land under the Closer Settlement and Returned Soldiers' Settlement Acts will be found on pages 739 to 745.

#### *Area Leased at 30th June, 1936.*

The total area of Crown lands leased in New South Wales as at 30th June, 1936, was 113,153,026 acres, inclusive of 32,927,170 acres under the Crown Lands Acts, 77,717,715 acres under the Western Lands Act, 2,005,724 acres

under the Forestry Act, 178,838 acres under the Mining Act and 323,579 acres under the control of the Water Conservation and Irrigation Commission. The area under each tenure is shown below:—

Tenure.	Area.	Tenure.	Area.
	acres.		acres.
<b>Virtually Alienated—</b>		<b>Other Long Term Leases—</b>	
Homestead Selections and Homestead Grants ...	1,602,997	Western Lands Leases†—	
Alienable Leases (Long Term and Perpetual)—		Perpetual ... ..	31,384,173
Homestead Farms ... ..	4,318,633	Other ... ..	43,607,480
Suburban Holdings ... ..	51,114	30 Years' Leases (Irrigation Areas) ... ..	3,107
Settlement Leases* ... ..	2,828,044	Total ... ..	74,994,760
Crown Leases* ... ..	6,810,192		
Conditional Purchase Leases* ...	168,437		
Conditional Leases* ... ..	12,065,120		
Returned Soldiers' Special Holdings ... ..	15,468	<b>Short Term Leases and Temporary Tenures—</b>	
Week-end Leases ... ..	198	Snow Leases ... ..	405,977
Town Lands Leases ... ..	66	Annual Leases ... ..	614,786
Irrigation Farm Leases (Irrigation Areas) ...	178,563	Occupation Licenses ... ..	1,358,402
Non-Irrigable Leases (do.) ...	21,158	Preferential Occupation Licenses ... ..	2,350,860
Town Lands Leases (do.) ...	289	Permissive Occupancies ... ..	1,494,111
Total ... ..	26,457,282	Irrigation Area Leases‡ ...	120,462
		Total ... ..	6,344,598
<b>Long Term Leases with limited right of Alienation—</b>			
Improvement Leases ... ..	241,912		
Scrub Leases ... ..	125,852	<b>Forest Leases and Occupation Permits ... ..</b>	2,005,724
Inferior Lands Leases ... ..	39,000	Mining Leases and Permits ... ..	178,838
18th Section Leases ... ..	4,083		
Church and School Lands Leases ... ..	11		
Conditional Leases (brought under Western Lands Act) ...	100,552		
Prickly-pear Leases ... ..	155,215		
Residential Leases ... ..	7,201		
Special Leases ... ..	895,001		
Total ... ..	1,568,827	<b>Grand Total ... ..</b>	113,153,026

\* New leases mainly perpetual; old leases convertible to perpetual leases.

† Leases under the Western Lands Acts were made convertible in part into perpetual leases in 1932.

‡ Includes 20,219 acres outside Irrigation areas, but under the control of the Water Conservation and Irrigation Commission.

Certain of the perpetual leases, such as homestead farm and irrigation farm leases, carry statutory rights of purchase, while most Crown leases and practically the whole of the conditional leases and conditional purchase leases are convertible in this way. Settlement leases also may be converted into conditional purchases, but the area so converted in any individual case, together with other freehold, alienable, or leased lands with more than five years to run held by the same individual, may not substantially exceed a home maintenance area as determined by the Local Land Board. Where there is such an excess area of lease it is converted into a conditional lease without any right of further conversion. The area of inconvertible conditional leases so created is included in the total shown in the table. The Crown Lands Amendment Act, which came into operation on 31st March, 1930, made Crown leases not within reserves from sale,

homestead selections and homestead farms convertible in their entirety without restriction. In all cases a covering reservation from sale, until revocation thereof, debars conversion.

Improvement and scrub leases are granted in respect of lands which require improvement before being made available for original holdings. Usually they are held in conjunction with other lands or in large areas, and the holder is given the right to apply for the conversion of sufficient to convert a home maintenance area into an alienable tenure. 18th Section, inferior lands, and church and school land leases are subject to similar provisions. The holder also has the right to sell his lease, and substantial areas are transferred to persons eligible to convert. As a consequence, parts of leases of these types do not revert to the disposal of the State, but the area held under such leases is not large.

Special leases held for certain purposes may be purchased by their holders, and other special leases may be alienated with the approval of the Minister, and so may the residential leases. All the leases under the Western Lands Act are situated in the Western Division, and the tenure may be extended subject to certain conditions of withdrawal for settlement and periodical re-appraisal of rentals. In 1932 these leases were made convertible as to home-maintenance areas into perpetual leases under conditions stated on page 737.

The short-term leases enumerated represent Crown lands reserved for various purposes, as well as lands available for settlement, but not yet taken up. The forest leases and occupation permits include principally grazing leases which are wholly within State forests, and administered by the Forestry Commission.

From the foregoing it will be understood that the classification is somewhat arbitrary, and is a general, rather than an absolute, indication of the manner in which the leasehold areas of the State are held.

#### RESERVES.

The total area of reserved lands in the State as at 30th June, 1936, was 16,529,296 acres. Reserves are not necessarily unoccupied, considerable areas being held under annual, special, scrub, or forestry leases or on occupation license or permissive occupancy. Such are included under appropriate headings in the list of leasehold tenures shown above.

The following is a classification of reserves according to the principal purpose for which reserved:—

	acres.
Travelling Stock .. .. .	5,331,289
Water .. .. .	610,923
Mining .. .. .	1,250,532
Forest .. .. .	2,115,804
Temporary Commons .. .. .	316,989
Railway .. .. .	41,252
Recreation and Parks .. .. .	322,468
Pending Classification and Survey .. .. .	3,420,506
From Conditional Purchase, within Goldfields .. .. .	458,577
From Sale or Lease other than Improvement Lease .. .. .	112,542
From Sale or Lease other than 18th Section Lease .. .. .	24,706
Camping .. .. .	284,032
Other .. .. .	2,239,676
Total .. .. .	16,529,296

The statement printed above is intended to give only an approximate idea of the relative extent of reserves of various kinds, and should not be taken as a measure of their absolute magnitude, because large areas are reserved for more than one purpose. For instance, the area principally reserved for forests is stated at only 2,115,804 acres, while the actual area of dedicated forest lands at 30th June, 1936, was 5,147,376 acres, and in addition 1,410,032 acres were under timber reserve, making a total of 6,557,408 acres. Of the area dedicated 1,987,346 acres of leases, situated entirely within State forests, were let to graziers and others by the Forestry Commission, 18,378 acres of State Forests under tenures of the Crown Lands Acts were administered by the Forestry Commission, and 41,446 acres, consisting of portions of leases not wholly within State forests, were administered by the Department of Lands.

Of the total area of reserves 11,415,146 acres, or 69 per cent., were situated in the Eastern and Central Divisions of the State.

A periodical revision of the reserved lands is made with the object of withdrawing from reserve any area which is not required as a reserve in the public interest.

#### CATCHMENT AREAS.

To minimise the dangers of erosion and to ensure proper protection of water catchments, a Catchment Areas Board has been constituted under the Crown Lands, Closer Settlement and Returned Soldiers' Settlement (Amendment) Act, 1935. The board consists of the Minister for Forests, the Under-Secretaries for Lands and for Agriculture, and the Forestry Commissioner (or their nominees) and an officer of the Water Conservation and Irrigation Commission, with the Minister for Forests (or, in his absence, the officer of the Department of Lands) as Chairman.

Lands reserved from sale for the purpose of a catchment area may not be modified, revoked or set apart without the recommendation of the board, nor may lands so reserved be granted under any form of lease or license (including additions for which statutory provision is otherwise made), or the term of any lease of such land be extended, except with the concurrence and subject to such conditions as the board may recommend. Exchanges of lands within reserves for catchment areas may not be effected without the approval of the board.

#### AREA AVAILABLE FOR SETTLEMENT.

The area of land within the disposal of the Crown without the necessity of resumptions and consequent compensation is not definitely ascertainable, since clauses providing for revocation or withdrawal have been inserted in a number of lease contracts, and considerable areas leased for long periods revert to the Crown periodically by the effluxion of time and by forfeiture. Particulars of those areas are not available.

Apart from these, however, certain lands under reserve, in addition to the lands comprised in the following short leases may be considered to have been within the disposal of the Crown at 30th June, 1936:—

	Area. acres.
Under Crown Lands Acts—	
Occupation license (including 19,006 acres in Western Division) .. .. .	983,451
Preferential occupation license .. .. .	370,468
Annual lease (including 18,514 acres in Western Division) .. .. .	614,786
Permissive occupancy (including 270,167 acres in Western Division) .. .. .	1,494,111
Under Western Lands Act—	
Occupation licenses .. .. .	374,951
Preferential occupation license .. .. .	1,980,392
Total .. .. .	5,818,159

With a view to classifying and bringing forward those areas which are suitable for settlement, systematic inspections of Crown lands are made periodically in each district.

The following areas were available for the classes of holdings specified at 30th June, 1936:—

Original Holdings for—	acres.
Crown Lease ... .. .	556,349
Homestead Farm ... .. .	1,518
Conditional Purchase (original) ... .. .	3,109,987
Suburban Holding ... .. .	2,593
Settlement Purchases .. .. .	456
Other Forms of Lease ... .. .	71,069
Additional Holdings (all classes) ... .. .	361,974
Total ... .. .	4,103,946

The area of 3,109,987 acres, shown above as available for original conditional purchase, consists mostly of Crown lands of an inferior nature, not reserved or specifically set apart. A considerable proportion of the lands comprising this area has been available for years, but has remained unselected. The total area of the lands classified and made available for settlement during 1935-36 was 64,035 acres, none of which was available exclusively for returned soldiers' settlement.

## EASTERN AND CENTRAL LAND DIVISIONS.

### METHODS OF ACQUISITION AND OCCUPATION.

The acquisition and tenure of land in the Eastern and Central Land Divisions are controlled principally by the Crown Lands Act (consolidated in 1913) and its amendments, together with regulations thereunder. In addition, the Closer Settlement Acts, Returned Soldiers' Settlement Acts, and the Forestry, Mining, Irrigation, and Prickly Pear Destruction Acts regulate certain tenures for specific purposes.

By these Acts a great variety of tenures—more than thirty in number—have been created to suit the various circumstances of the lands and settlers of New South Wales and the changing character of rural settlement.

The principal means by which Crown lands in the Eastern and Central Divisions and lands in the Western Division remaining under the Crown Lands Act may be acquired, and the tenures under which they may be held, may be classified as follows:—

Non-Residential Tenures.	Tenures involving Residential Conditions.
Methods of Absolute Alienation.	
Auction sale. After-auction purchase. Special non-competitive sales. Conditional purchase (40 to 320 acres). Exchange. Irrigation farm purchase. Town lands lease purchases. Week-end lease purchases.	Conditional purchase. Settlement purchase. Returned soldiers' special holding purchase. Improvement purchase on goldfields. Soldiers' Group Purchase. Suburban holding purchases.
Leases Carrying Statutory Rights of Entire Alienation.*	
Special conditional purchase lease (up to 1,920 acres). † Town lands lease. †	Homestead selection and homestead grant. ‡ Homestead farm. † Conditional lease. † Conditional purchase lease. † Crown lease. † Irrigation Farm lease. † Non-irrigable lease. † Town Land lease (Irrigation Area). †
Leases Alienable wholly or in Part under Certain Conditions.*	
Improvement lease. § Scrub lease. § Inferior lands lease. § Special lease (for certain purposes). § Week-end lease. † Prickly-pear lease. Church and school lands lease.	Settlement lease. † Suburban holding. † Residential lease. Returned soldiers' special holding.
Leases Carrying No Statutory Rights of Alienation.	
18th section lease. Occupation license. Preferential occupation license. Permissive occupancy. Occupation permit (forest lands). Forest lease. Snow lease. Mineral and auriferous lease. Annual lease. 30 years' lease (Irrigation Areas).	

\* Unless within a reserve from sale.

† Perpetual, or mainly convertible to perpetual.

‡ Virtually an alienation (title is freehold and rent payable a quit rent). § Convertible only if holder already resides on the lease, or on another holding of applicant within reasonable distance therefrom.

The rights of alienation attached to the various classes of leases shown above differ widely, and are usually subject to the qualification that the area to be alienated, together with all other lands held (other than non-convertible leases within five years of expiry), does not substantially exceed a home maintenance area and is not within a reserve from sale. Conditional purchase leases, conditional leases, and (since 1930) Crown leases, homestead farms, homestead selections and grants, are almost entirely alienable, while settlement leases are subject to restriction in regard to home-maintenance area. Improvement leases, scrub leases, and inferior lands leases are alienable only where residence is performed and generally

when the leases are about to expire and are subject to any reservation, the home maintenance limitation and other restrictions inserted in individual leases. Special and annual leases may become freehold only by conversion to conditional purchase with Ministerial consent, and residence within three months of approval is a necessary condition of conversion.

*Appraisalment of Capital Value or Annual Rental.*

The Crown Lands (Amendment) Act, 1931, conferred upon the holders of land in course of purchase or held under the principal leasehold tenures the right to apply, not later than 2nd October, 1935, for the reappraisalment of the capital value or the annual rental of their holdings. In the exercise of this right, 1,292 applications were made during the year ended 30th June, 1936, making the total 16,245 to that date. Of the latter 14,869 have been finalised, 584 are in the final stages, 769 are being valued and 23 are awaiting action.

During 1935-36 the capital value of holdings with an aggregate area of 3,798,132 acres and the annual rental of holdings comprising 4,205,019 acres were appraised. The reappraised values were respectively £2,763,556 and £49,975, the decrease in capital value being £929,666, or 25.2 per cent., and in annual rent £23,339, or 31.8 per cent.

Since 1931 the capital value of holdings comprising 14,155,589 acres and the annual rent of holdings with an aggregate area of 9,063,706 acres have been appraised. The capital value was reduced from £14,409,567 to £10,494,603 or by 27.2 per cent. and the annual rent from £171,476 to £113,257 or by 33.9 per cent.

Re-appraisements under these provisions in respect of tenures under the Closer Settlement Acts are shown on page 742.

*Crown Lands (Amendment) Act, 1932, and Crown Lands, Closer Settlement and Returned Soldiers' Settlement (Amendment) Act, 1935.*

Certain provisions of these Acts apply generally to lands held under the various Acts relating to the disposal of Crown lands.

In respect of interest on the purchase of land or of Crown improvements before 1st January, 1933, and of the annual rental or fee under any lease, occupation license, or permit under those Acts (subject to certain exceptions), a reduction of twenty-two and one-half per centum (22½ per cent.) of the amount payable was made effective for three years. The Crown Lands (Amendment) Act, 1935, extends the period of operation of this provision for a further three years.

Settlers adversely affected by flood, fire, drought, storm or tempest, after 1st January, 1927, may apply for relief under these Acts. Relief may be afforded by the Local Land Board, in the form of (a) postponement of payments of instalments payable in respect of purchase of land or Crown improvements, or (b) postponement, waiver or remission of interest on such debts, or of the annual rent of any lease from the Crown under those Acts. The board may also revalue any improvements in the course of purchase which owing to such causes have become depreciated in value.

The Minister is empowered to fund arrears in respect of debts due to the Crown, distributing payments over twenty years; to postpone payment of instalments, the interest on which may be added to the principal, or be allowed to remain as a non-interest-bearing debt; to permit of interest only being paid in lieu of instalments; and where interest only is payable, to postpone payment of interest in like manner; or, if the circumstances so warrant, to direct that the whole or part of interest on deferred payments be not charged.

## METHODS OF PURCHASE.

*Conditional Purchase.*

This method of alienation, introduced by the Crown Lands Act of 1861, has become the most extensively used of all. It is a system of Crown land sales by deposit and annual instalment, and all the principal leasehold tenures may be converted, under certain conditions, wholly or in part into conditional purchase, which may be considered the basal tenure of land settlement in New South Wales.

The outstanding feature of the tenure is the limitation placed upon the area of land which may be held by a conditional purchaser during the currency of his purchase. The area to be purchased under residential conditions except in special areas may not be less than 40 acres, and must not exceed 1,280 acres in the Eastern land division, and 2,560 acres in the Central land division, unless the land is classified, or must not exceed 320 acres in either division when the buyer does not undertake to reside on the holding. Special areas without residential conditions, ranging up to 320 acres in the Eastern land division, and up to 640 acres in the Central land division, may also be made available.

Any conditional purchaser may take up the maximum area at once, if it is available, or may make a series of additional purchases as land becomes available. To facilitate this, a special tenure (conditional lease) has been created whereby a conditional purchaser may take up land not exceeding three times the area of his conditional purchase, and this may be converted into conditional purchase. The combined area so acquired may exceed the prescribed divisional limit, but only where the land is classified, or to make up a home maintenance area as determined in individual cases by the Local Land Board. Holders of freehold land of at least 40 acres are permitted also to acquire lands as additional conditional purchases and conditional leases, provided the total area of each holding so increased does not exceed the divisional maximum nor a home maintenance area.

The price of the land for a residential conditional purchase is £1 per acre, unless otherwise notified, in addition to the value of improvements (if any) assessed by the Local Land Board. A deposit of 5 per cent. of the purchase money must be paid in addition to survey fee and stamp duty. The first annual instalment is due at the end of three years from the date of application and, at the holder's option, may be at the rate of 9d. or 1s. for each £ of the price of the land. Such payment comprises repayment of principal, with interest at the rate of  $2\frac{1}{2}$  per cent. per annum. The term of purchase, according to the rate of instalment paid, is forty-one or twenty-eight years. Payment for improvements existing at date of purchase may be made in fifteen equal annual instalments, including interest at the rate of 4 per cent. Under the Crown Lands (Amendment) Acts of 1932 and 1935 the Minister is empowered to postpone payment of instalments or interest in the manner indicated on the preceding page, while payment for improvements, the value of which exceeds £300, irrespective of whether such improvements are on one or more purchases, may be allowed to be made by instalments extending over a period of not more than ten years beyond the period (maximum fifteen years) already allowed. Between 1902 and October, 1931, the value of the land was subject to appraisal upon application from time to time; then it was provided that the price might be appraised only upon application within two years from 2nd October, 1931 (subsequently extended to four years from that date), or within five years of confirmation.

The conditions to be observed by purchasers include *bona fide* residence upon the holding for five years after confirmation unless modified by the Local Land Board which in special cases may allow residence to be performed anywhere within reasonable working distance of the holding; fencing or other improvements, as prescribed, to the value of 6s. per acre (but not exceeding 30 per cent. of the price of the land or £384) to be effected within three years, and to the value of 10s. per acre (but not exceeding 50 per cent. of the price of the land or £640) to be effected within five years of confirmation; and the payment of all instalments and prescribed charges.

The price of land taken up as a non-residential purchase is double the price of the same land if taken up as a residential purchase. The term of payment is twenty-eight years. Fencing within twelve months of confirmation and other improvements to the value of £1 per acre within five years must be effected, or alternatively fencing may be dispensed with and improvements effected within five years to the value of £1 10s. per acre. There are very few non-residential conditional purchases.

All applications connected with the purchases are considered by the Local Land Board, and certificates are issued to the holder by the chairman upon survey and confirmation, and a further certificate when all conditions, other than payment of balance of purchase money or survey fees, have been fulfilled. After all conditions have been fulfilled a Crown grant is issued to the holder.

Under certain conditions a residential conditional purchase may be converted into a homestead farm, and a non-residential conditional purchase into a residential purchase or homestead farm.

Transfer may be made after the certificate has been issued, but original purchases applied for after 31st January, 1909, may be transferred (except by way of mortgage) only with the consent of the Minister for Lands.

A conditional lease of not less than 40 acres may be obtained only in conjunction with a conditional purchase or freehold lands formerly held on conditional purchase, subject to the various conditions set out above in respect of conditional purchases.—(Further particulars as to conditional leases are given on a later page.)

#### *Number and Area of Conditional Purchases and Conditional Leases.*

Transactions in respect of original and additional conditional purchases from 1862 to 30th June, 1936, were as follow:—

Year ended 30th June.	Completed Conditional Purchases for which deeds were issued during year.		Uncompleted Conditional Purchases in existence.		Conditional Leases (other than Perpetual). Gazetted or Confirmed during year.	
	No.	Area.	No.	Area.	No.	Area.
		acres.		acres.		acres.
1862-1926 ...	164,704	22,283,708	69,866	19,263,629	22,620	13,985,880.
1927 ...	2,887	449,117	69,046	19,635,068	68	47,267
1928 ...	2,645	394,306	68,278	20,067,640	89	58,181
1929 ...	3,710	315,358	66,170	20,619,758	79	52,606
1930 ...	2,024	299,485	66,243	20,475,734	84	26,440
1931 ...	2,109	320,832	65,093	20,511,043	76	26,078
1932 ...	1,833	284,858	63,667	20,336,336	50	43,308
1933 ...	1,908	313,323	62,177	20,073,559	62	42,806
1934 ...	2,360	450,521	60,344	19,704,897	38	19,351
1935 ...	2,532	546,666	59,720	19,560,388	11	4,463
1936 ...	2,438	491,816	57,475	18,815,531	4	740
Total (as at 30th June, 1936)	189,150	26,149,990	57,475	18,815,531	14,046*	8,207,979*

\* Leases in existence (other than perpetual leases).

The particulars of applications for conditional purchases shown above are exclusive of applications to convert other tenures into conditional purchases, whereas the figures relating to completed and uncompleted conditional purchases include large areas converted from other tenures. The total area alienated and in course of alienation by conditional purchase as at 30th June, 1936, was 44,965,521 acres, and, in addition, there were 8,207,979 acres of associated conditional leases (other than perpetual leases) which were almost wholly convertible into conditional purchases. There were also 3,965 holdings under Perpetual Conditional leases with an aggregate area of 3,857,141 acres. The area of uncompleted conditional purchases shown above includes a number upon which payments have been completed, although deeds have not yet been issued.

The area of conditional purchases converted to other tenures has been deducted from the totals shown above.

The number of conditional purchase selections shown is several times greater than the total number of rural holdings in the State, and does not, of course, represent original holdings. It represents the number of individual blocks, both original and additional, taken up as conditional purchases and it includes those which have been incorporated with other holdings after deeds have been issued.

#### *Homestead Selections and Homestead Grants.*

The appropriation of areas for homestead selection was a prominent feature of the Act of 1895, the land chosen for subdivision being generally agricultural land, and the maximum area of holdings limited to 1,280 acres. The tenure is lease in perpetuity. Rent is at the rate of 1½ per cent. per annum for the first five years or until the issue of the homestead grant, when it is raised to 2½ per cent. In cases where residence is performed by deputy the rent is 3½ per cent. of the appraised value until issue of the grant, and thereafter 2½ per cent. The value is subject to appraisal only within five years of confirmation. Certain residential and improvement conditions are imposed, and on compliance with these for a term of five years a homestead grant is issued. A homestead grant is a freehold title (the rent payable is a quit rent only) and, except as against the Crown, confirmation of a homestead selection is, by law, deemed to be a sale of the land.

Since 1912 practically no lands have been made available for original homestead selections, such tenure having been replaced by that of homestead farm. Applications dealt with after 1912 are either in connection with areas previously set apart for homestead selections, or as additional areas, principally the latter. The following statement shows the applications and confirmations in regard to homestead selections and homestead grants issued up to 30th June, 1936.

Year ended 30th June.			Homestead Selections Confirmed.		Homestead Grants Issued.		Homestead Selections and Grants in existence.	
			No.	acres.	No.	acres.	No.	acres.
1835 to 1929	...	...	8,133	2,947,397	6,166	2,382,891	2,061	1,198,737
1930	...	...	5	5,123	16	25,204	2,010	1,190,090
1931	...	...	14	35,008	26	57,233	2,044	1,389,796
1932	...	...	6	13,376	16	22,953	2,080	1,501,548
1933	...	...	7	3,386	18	22,794	2,093	1,522,901
1934	...	...	2	572	16	44,023	2,090	1,537,044
1935	...	...	5	21,381	16	50,167	2,100	1,584,349
1936	...	...	1	3,213	28	58,062	2,113	1,602,997

Operations under this tenure were at first very extensive, but they gradually diminished, and in 1911-12, the year before the homestead farm was introduced, only 94,641 acres of homestead selections were confirmed. The Crown Lands Amendment Act of 1908, authorised the conversion of homestead selections and grants into conditional purchases and conditional leases, and a further amendment in 1930 made these holdings convertible in their entirety without restriction. Extensive advantage has been taken of this provision, and to 30th June, 1936, an area of 2,202,552 acres of homestead selections and grants had been so converted. This accounts for the difference between the area of homestead selections confirmed (3,029,461 acres) and the area remaining in existence (1,602,997 acres), the difference having been reduced latterly by the extensive conversions of improvement leases into homestead selections. Under the Crown Lands (Amendment) Act of 1912, a homestead selection or grant may be converted into a homestead farm, but there have been only thirty-eight cases of conversion of this kind, covering 177,274 acres.

#### *Auction Sales and After-auction Purchases.*

Crown lands are submitted for auction sale under two systems. Under the ordinary system the balance of purchase money is payable, without interest, within three months of the day of sale, while, under the deferred payment system, the balance is payable by instalments, with 5 per cent. interest, distributed over a period not exceeding ten years. In either case, not less than 10 per cent. of the purchase money must be deposited at the time of sale. Postponement of payments of instalments or interest may also be approved in the manner indicated at page 718.

Auction sales were limited by law in 1884 to 200,000 acres in any one year, but the area sold by auction and after-auction purchases, although formerly extensive, has amounted to only 45,281 acres in the last nineteen years. Town lands may be sold in blocks not exceeding half an acre, at an upset price of not less than £8 per acre; and suburban lands must not exceed 20 acres in one block, the minimum upset price being £2 10s. per acre. Country lands may be submitted in areas not exceeding 640 acres, the upset price being not less than 15s. per acre. The value of improvements on the land may be added to the upset price.

Town or suburban land or portions of country land of less than 40 acres each, which have been passed at auction, may be bought with the Minister's consent, at the upset price. A deposit of 25 per cent. of such upset price is payable at the time of application, the balance being payable on the terms fixed for the auction sale.

Alienation by this method is very restricted. Only 483 acres were sold by auction during 1935-36 in 262 lots, realising £39,722. One hundred and twenty-six acres were sold as after-auction purchases in 283 lots, realising £7,586.

#### *Improvement Purchases.*

Holders of miners' rights or of business licenses on a gold-field in authorised occupation by residence on land containing improvements may purchase such land without competition. Improvements must include a residence or place of business, and be equivalent to £8 per acre on town land, and £2 10s. per acre on any other land. Alienation by this means has never been extensive. During 1935-36 there were 13 lots sold embracing an area of 7 acres, yielding the amount of £619.

*Special Non-Competitive Sales.*

These comprise land reclamations, rescissions of reservations, unnecessary roads, public land to which no way of access is available, or which is insufficient in area for conditional sale, etc., also residential leases, and the area of Newcastle pasturage reserves for which the purchase money has been paid in full. The amount realised by special sales in 1935-36 was £11,233 in respect of 3,222 acres of land, including £9,214 for 2,819 acres of alienated roads; £782 for purchase of 336 acres of residential leases; and £1,237 for 67 acres otherwise acquired.

The owner in fee-simple of land having frontage to the sea, or to any tidal water or lake, who desires to reclaim and purchase any adjoining land lying below high-water mark, may apply to the Minister for Lands to do so, except in the case of Port Jackson, the control of which is vested in the Maritime Services Board. Reclamations which might interrupt or interfere with navigation are not authorised.

*Area Alienated by Crown Land Sales.*

Particulars of areas disposed of under the three preceding headings, in quinquennial periods, since 1900, are as follow:—

Year ended 30th June.	Auction Sales.	After-auction Sales.	Improvement Purchases.	Special Sales.	Total.
	acres.	acres.	acres.	acres.	acres.
1900-04* ...	261,328	10,004	942	3,782	276,056
1905-09 ...	89,430	15,801	181	5,817	102,229
1910-14 ...	16,768	6,994	269	9,976	34,007
1915-19 ...	20,527	2,709	241	9,743	33,220
1920-24 ...	9,340	2,963	143	10,792	23,238
1925-29 ...	7,431	1,792	138	11,126	20,487
1930-34 ...	1,231	600	72	16,640	18,543
1935 ...	125	101	11	3,564	3,801
1936 ...	483	126	7	3,222	3,838

\* Calendar years.

*Exchange of Land between the Crown and Private Owners.*

Before the granting of fixity of tenure in connection with pastoral leases, the lessees had made it a practice to secure portions of their runs by conditional purchases and purchases in fee-simple. The practice was disadvantageous to the public estate, because Crown lands were left in detached blocks severed by lessees' freehold properties; and the lessees realised that it would be convenient for them to gather their freeholds together in one or more consolidated blocks by surrender of private lands in exchange for Crown lands elsewhere.

Under the provisions of the Crown Lands Consolidation Act, 1913, the Governor, with the consent of the owner, may exchange any Crown lands for any other lands of which a grant in fee-simple has been issued.

The Governor may accept, in exchange for Crown lands, lands in respect of which a balance of purchase money remains unpaid, if upon payment of such balance the right to a grant in fee-simple becomes absolute. In any such case a grant of Crown lands in exchange will not be issued until the balance of purchase money has been duly paid.

During 1935-36 thirty-four applications were received for the exchange of private for Crown lands; six were refused or withdrawn and nineteen covering 4,965 acres were completed.

*Settlement Purchase and Irrigation Farm Purchase.*

Particulars of these methods of acquiring land are shown on later pages in relation to Closer Settlement and Irrigation Settlement.

## ALIENABLE LEASES.

The principal kinds of leases which may be converted under specified conditions to freehold tenures wholly or in part are the conditional lease, Crown lease, settlement lease, improvement lease, special lease, scrub lease, inferior lands lease, conditional purchase lease, irrigation farm lease, non-irrigible lease, prickly-pear lease, and homestead lease. Other leases of this class are suburban holding, residential lease, week-end lease, and leases of town lands.

*Leases in Perpetuity.*

Under the provisions of the Amending Act of 1932 (since 31st December, 1932) holders of conditional leases, conditional purchase leases, Crown leases and settlement leases, may apply for conversion of such leases to leases in perpetuity. Up to 30th June, 1936, extension had been granted in respect of 3,651 conditional leases, 39 conditional purchase leases, 916 Crown leases, and 681 settlement leases. Inclusive of entirely new holdings confirmed as leases in perpetuity, and of leases with fixed terms which had been converted, the number and area of perpetual leases of each of these forms of tenure subsisting at 30th June, 1936 were:—

Tenure.	No.	Area.
		acres.
Conditional lease ... ..	3,965	3,857,141
Conditional purchase lease ... ..	42	45,700
Crown lease ... ..	1,306	2,620,066
Settlement lease ... ..	684	1,729,398

There were 20,296 perpetual leases of all forms covering an aggregate area of 45,824,964 acres at 30th June, 1936. In these were included 1,732 perpetual leases with a total area of 31,384,173 acres held under the Western Lands Act.

*Conditional Leases.*

Certain particulars regarding these leases have been shown on a previous page in connection with conditional purchases. The tenure was introduced by the Act of 1884. A conditional lease may be obtained by any holder of a conditional purchase (other than non-residential or a conditional purchase within a special area in the Eastern Division), or of freehold lands formerly held as conditional purchase. Lands available for conditional purchase are available also for conditional lease, with the exception of lands in the Western Division, and of lands within a special area or a reserve. Applications must be accompanied by a provisional rent of 2d. per acre and a survey fee, except where otherwise provided. The lease was formerly for a period of forty years, but it was provided in 1924 that, upon application during the last five years of its currency, a lease might be extended for a period of twenty years. Under the Amending Act of 1932 application may be made (without abrogating existing rights of acquiring freehold titles) for the conversion of conditional

leases to leases in perpetuity. All conditional leases taking effect on or after 30th December, 1932, are leases in perpetuity, saving such parts thereof as are within certain reserves and are required in the public interest.

The rent as determined by the Land Board is payable yearly in advance, and is subject to review only upon application within five years of confirmation of the lease. Any conditional lease, with the exception of a small number of inconvertible conditional leases created by conversion from other tenures, may be converted at any time during its currency into a conditional purchase or homestead farm, and an Act passed in 1927 enabled conditional leases to be transferred and held separately from the original holding with which they were granted.

Applications for 3 ordinary conditional leases were lodged during 1935-36, and 4, representing 740 acres, were confirmed.

Conditional leases, to the number of 143, embracing 49,498 acres, were converted into conditional purchases during 1935-36, and conditional leases containing an area of 29,269 acres were created by conversion. Gazetted conditional leases (other than perpetual leases) in existence at 30th June, 1936, numbered 14,046, embracing 8,207,979 acres, at an annual rental of £115,699.

Perpetual conditional leases in existence at 30th June, 1936, numbered 3,965, with an aggregate area of 3,857,141 acres and annual rental of £57,660. During the year 1935-36 fifty-six new perpetual conditional leases were confirmed with a total area of 20,312 acres.

#### *Conditional Purchase Leases.*

This form of tenure was created in 1905; but is obsolete for the purpose of selection, as lands are not now made available under it. The area held under conditional purchase lease reached a maximum of 677,961 acres in 1911, and has decreased steadily since.

The term of the lease was originally forty years, but was increased to fifty years in 1924. The annual rent is  $2\frac{1}{2}$  per cent. of the capital value, which is fixed upon notification, subject to review only within five years of confirmation of the lease. Under the Amending Act of 1932 conditional purchase leases may be converted to leases in perpetuity, provided they are not included in certain reserves and required for public purposes, without affecting other conversion rights hitherto obtaining. No fixed limit was placed on areas made available, but conditions as to residence, cultivation, etc., were prescribed. Conversion to the tenures of conditional purchase and homestead farm is permitted, the total area so converted being 519,132 acres.

A special conditional purchase lease could be granted without obligation of residence in respect of areas not exceeding 320 acres on condition that improvements to the value of 10s. or more per acre, as determined by the Minister, were effected within three years of application.

The leases holding good at 30th June, 1936, numbered 189 with an area of 122,737 acres, the annual rent amounting to £3,754.

*Crown Leases.*

Crown leases were constituted under the Crown Lands Amendment Act, 1912, and lands are specially set apart by notification in the *Government Gazette* as available for Crown lease. Crown lands available for conditional purchase (unless otherwise specified in the *Gazette*) are available also for Crown lease. Land may be set apart for Crown lease to be acquired only as additional holdings.

The term of Crown leases existing prior to 30th December, 1932, was 45 years with the right of extension to leases in perpetuity in certain cases. Since that date Crown leases have been issued as leases in perpetuity except in some cases when the term is 45 years with the right of conversion to perpetual leases on approval. The annual rent is  $1\frac{1}{2}$  per cent. of the capital value, as determined within five years of confirmation of the lease. The rent payable for the first year may be remitted if, in addition to the improvements required as a condition of the lease, except boundary fencing, an equal sum be spent by the lessee in improving the land. Upon the expiration of a Crown lease the last holder thereof possesses tenant rights in all improvements other than Crown Improvements. The lessee is required to reside on the land for five years, commencing within six months of the confirmation of the lease, but in special cases, may be allowed to perform residence anywhere within reasonable working distance of the holding. The lease may be protected against sale for debt in certain circumstances. Under the conditions attached to the lease when granted in 1912 the lessee was empowered during the last five years of the lease, unless debarred by notification setting the land apart, to apply to convert into a homestead farm so much of the land as would not exceed a home maintenance area, but this provision was repealed by the Amending Act of 1932. By the Act of 1917, so much of a Crown lease, as did not, with other freehold or convertible leases held by the lessee, exceed a home maintenance area, and was not covered by a reservation from sale, became convertible into a conditional purchase with, or without a conditional lease. In 1930 the home maintenance area qualification was removed, and, apart from areas reserved from sale, Crown-leases became convertible in their entirety in this way. Since the passing of the Act of 1917, 1,572,547 acres of Crown leases have been converted into conditional purchase and conditional leases.

Crown leases (other than perpetual) granted and current in recent years are shown below:—

Year ended 30th June.	Applications Confirmed.		Leases current at 30th June.		
	No.	Area.	No.	Area.	Rent.
		acres.		acres.	£
1912-1929 ...	6,336	7,980,894	3,944	5,460,250	46,061
1930 ...	228	282,154	3,979	5,531,875	46,209
1931 ...	243	344,192	4,085	5,673,533	46,306
1932 ...	164	208,751	4,135	5,852,505	47,323
1933 ...	178	282,702	4,235	5,965,049	48,413
1934 ...	122	154,794	3,875	5,082,975	39,664
1935 ...	52	70,524	3,704	4,628,512	31,584
1936 ...	3	489	3,390	4,190,126	27,575

The figures shown above include a number of Crown leases made available specially for returned soldiers. Particulars of these are shown on a later page.

This tenure was applied extensively from its inception, and practically superseded the settlement lease under which operations had been extensive until 1912. Most of the Crown lands made available each year are set apart under this tenure and that of the homestead farm, also introduced in 1912. The total area of Crown leases (other than perpetual) confirmed during the period of tenure has been in existence was 9,324,500 acres, which has been reduced by forfeitures, conversions, etc., so that the area remaining under Crown lease (other than perpetual) at 30th June, 1936, was 4,190,126 acres.

During the year ended 30th June, 1936, there were 188 applications for perpetual Crown leases. Applications confirmed numbered 131 with an aggregate area of 164,822 acres, the annual rental of which amounted to £852. At 30th June, 1936, there were current 1,306 perpetual Crown leases with an aggregate area of 2,620,066 acres and annual rental of £19,209.

#### *Settlement Leases.*

This tenure was created in 1895. Until 1912 it was used extensively in making land available for settlement, but since the introduction of the Crown lease in that year fresh operations under it have been inconsiderable. Under its conditions farms gazetted as available for settlement lease can be obtained on application accompanied by a deposit of six months' rent, and one-tenth of survey fee. The duration of the lease is forty years, but under the Amending Act of 1932 application may be made to convert so much of a settlement lease as does not substantially exceed a home maintenance area to a lease in perpetuity at existing rental without affecting existing rights of conversion into conditional purchase. The leaseholder is required to reside on the lease for the first five years of its currency unless approval is obtained to perform residence elsewhere within reasonable working distance of the lease. Rent is payable at the rate specified upon gazettal, subject to appraisalment within five years of confirmation of the lease.

From its inception very large areas of land were taken up under this lease, and by 30th June, 1913, the total area of settlement leases confirmed to applicants was 8,793,663 acres. An amendment of the Crown Lands Act gave holders of settlement leases the right to convert such part of their leases as, with freehold or convertible lands already held, does not substantially exceed a home maintenance area into a conditional purchase with an associated conditional lease, but where the total holding of freehold land so created would exceed a home maintenance area the excess is granted as conditional lease without rights of conversion.

Between 1909 and 30th June, 1936, a total area of 5,675,707 acres of settlement leases were converted under these conditions into other tenures, and 63,856 acres, chiefly of homestead farms and special leases, had been converted into settlement leases. Since 1913 only 123,849 acres of new settlement leases have been confirmed, while large areas have reverted to the Crown by forfeiture, etc. At 30th June, 1936, there were in existence 424 ordinary settlement leases, comprising 1,098,646 acres, at an annual rental of £12,748.

During 1935-36 applications were received in respect of one original and one additional perpetual settlement lease, and at 30th June, 1936, there were in existence 684 perpetual settlement leases with an aggregate area of 1,729,398 acres, the annual rental of which amounted to £22,172.

*Improvement Leases.*

This tenure was introduced in 1895 and, by the end of 1903, an area of 9,716,006 acres of improvement leases had been let, although the area actually current was much smaller. After that year the areas taken up annually showed a considerable falling off, and up to 30th June, 1936, the total area of improvement leases which had been let was 11,602,699 acres, of which only 241,912 acres remained current. The maximum area of improvement leases current at any time was 6,884,330 acres in 1910, the subsequent decrease having been brought about mainly by the withdrawal of leases for settlement in terms of individual leases and a number of other causes, such as forfeiture, expiry, resumption, and the transfer of improvement leases wholly within State forests to the control of the Forestry Commission and their conversion into forest leases.

An improvement lease may consist of any land in the Eastern or Central Divisions considered unsuitable for closer settlement until improved. It may be obtained only by auction or tender, but prior to 1920 certain leases were granted at fixed rentals under improvement conditions. The rent is payable annually, and the lease is for a period of twenty-eight years, with an area not exceeding 20,480 acres. Upon the expiration of the lease the last holder is deemed to have tenant-right in certain improvements. Provided the lease is not within a reserve from sale, the lessee may apply for a homestead selection of an area not in excess of a home maintenance area, including the area on which his dwelling-house is erected. Convertibility depends upon actual residence upon the lease or on land owned by the applicant within reasonable working distance of the lease, for a period of five years immediately prior to making the application. These provisions have been operative in a modified form since 1919, and fully so since 1930, and a total area of 1,059,437 acres has been converted in this way. The Advisory Board, constituted under the Closer Settlement Act, 1907, may inspect any land comprised in an improvement lease, and if it finds such land suitable for closer settlement the Minister may resume the lease, the lessee being compensated. To 30th June, 1936, a total area of 806,217 acres had been withdrawn in this way, £200,802, being paid as compensation to lessees.

During 1935-36 one improvement lease, with an area of 6,400 acres, was granted at an annual rental of £8. Nine improvement leases, with a total area of 12,590 acres, were converted into homestead selections. At 30th June, 1936, there remained current 77 improvement leases and leases under improvement conditions, with an area of 241,912 acres and rental of £1,342.

*18th Section and Pastoral Leases.*

Under the Crown Lands Amendment Act of 1903, the registered holder of any pastoral lease, preferential occupation license, or occupation license, could apply for a lease, for not more than twenty-eight years, of an area not exceeding one-third of the total area of the land comprised within the lease or license, subject to such rent, conditions or improvements, and withdrawal for settlement as may have been determined. These are known as 18th Section Leases, having been granted under the Land Act of 1903, which has been repealed. The area of land held under this tenure has decreased rapidly since 1914, when the area so held exceeded a million acres. Generally, the conditions of tenure and of conversion of these leases are similar to those of improvement leases.

At 30th June, 1926, these leases, also known as "Leases to Outgoing Pastoral Lessees," numbered 4, with an area of 4,083 acres, and rental of £50. Upon the recommendation of the Closer Settlement Advisory Board the Minister may resume for closer settlement any 18th Section lease.

*Homestead Farms.*

This tenure created in 1912 is a lease in perpetuity, but certain homestead farms specifically indicated in the Act, may be resumed at any time after 30th June, 1950, without compensation other than for improvements on the farms. Annual rent is charged at the rate of  $2\frac{1}{2}$  per cent. of the capital value, but for the first five years the holder, in lieu of rent, may expend an equal amount on improvements of a permanent character, which (except boundary fencing) are in addition to those which are required otherwise by the conditions of the lease. The capital value of the holding is subject to appraisalment only within five years of confirmation of the lease.

Crown lands available for conditional purchase (unless otherwise notified in the *Gazette*) are available also for homestead farms. Land may be set apart for additional homestead farms, but is available only to applicants whose total holding, if successful, would not substantially exceed a home-maintenance area. Any Crown lands may be set apart for disposal as homestead farms before survey. There is no definite limit placed on the area of a homestead farm, but it is generally notified as available in home-maintenance areas.

A condition of five years' residence is attached to every homestead farm, but in special cases residence, anywhere within reasonable working distance, may be allowed, and residence in prior occupation of the area under permissive occupancy may be taken into account. A perpetual lease grant is issued after the expiration of five years from confirmation of the application, if the holder has complied with all the conditions.

Particulars relating to applications for homestead farms and conversions from other tenures during the last five years are shown below:—

Year ended 30th June.	Applications Confirmed.		Created by Conversion from other tenures.		Reversal of forfeiture and increased area.		Less—Forfeited, decrease in area, and conversions into other tenures.		Homestead Farms in existence at end of year.	
	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.
		acres.		acres.		acres.		acres.		acres.
1932	106	54,767	11	19,428	4	4,343	44	49,995	3,936	4,210,279
1933	91	48,378	9	20,154	6	3,157	55	56,032	3,987	4,225,936
1934	174	117,861	16	38,354	5	5,266	117	161,760	4,065	4,225,657
1935	86	36,461	33	44,978	11	1,997	51	102,141	4,144	4,206,952
1936	54	32,372	139	170,237	4	2,958	53	93,886	4,288	4,318,633

The total area of homestead farms confirmed to 30th June, 1936, was 5,498,279 acres, and after adjustments of area by reason of conversion, forfeiture, etc., there remained in existence 4,318,633 acres under this tenure.

The holder of a conditional purchase, or conditional purchase and conditional lease, or homestead selection, or homestead grant, or conditional purchase lease, or special lease, under certain conditions, may convert such holding into a homestead farm. The area of homestead farms so created to 30th June, 1936, was 520,713 acres. Under certain conditions a homestead farm may be converted into a conditional purchase lease or into a conditional purchase, with or without a conditional lease, or since February,

1927, into a Crown lease. An Act of 1930 made homestead farms convertible in their entirety without restriction; 1,000,054 acres of homestead farms had been converted into other tenures prior to 30th June, 1936. A homestead farm, which is a conversion of a settlement purchase under provision now repealed, may be reconverted into a settlement purchase.

#### *Leases of Scrub and Inferior Lands.*

These tenures were introduced in 1889 in order to provide for the effective occupation and improvement of lands not suited for ordinary pastoral occupation. The duration of individual leases is fixed on gazettal, the maximum being 21 years for a scrub lease and 20 years for an inferior lands lease, subject to extension to 28 years in each case or to forty years if infested with prickly pear.

The area of inferior lands leases has never been extensive, and the area under scrub leases reached its maximum of 2,273,123 acres in 1912, and then diminished steadily.

At 30th June, 1936, there were in existence 36 scrub leases, with an area of 125,852 acres, and rental of £394; and 9 inferior lands leases, embracing 39,000 acres, at a rental of £126.

#### *Special Leases.*

Special leases not exceeding an area of 1,920 acres are issued to meet cases where land is required for some industrial or business purpose. A special lease may be obtained for a period not exceeding twenty-eight years on conditions determined by the Minister, and more than one lease may be granted an applicant in his discretion.

The Crown Lands Act, passed in 1908, provides for the conversion of special leases held for certain purposes, with the consent of the Minister, into conditional purchase lease, original or additional conditional purchase, original or additional homestead selection, original or additional settlement lease, conditional lease, or homestead farm. Under this provision 1,513,898 acres of special leases have been converted into various new tenures.

The number of special leases granted during 1935-6 was 954, with a total area of 128,671 acres, and 338 leases, representing 67,370 acres, were converted into other tenures. After allowance has been made for leases which had terminated, were forfeited, surrendered, etc., and those which expired by effluxion of time, 8,666 special leases, with an area of 895,001 acres and rental of £45,386, were current at 30th June, 1936.

#### *Prickly Pear Leases.*

Under the Prickly Pear Destruction Act, 1901, certain common or Crown lands infested with prickly pear may be offered for lease by auction or tender, and may be let for a term not exceeding twenty-one years, subject to prescribed conditions as to improvements, rent, etc. At 30th June, 1936, the number of prickly pear leases was 122, and the area so leased was 155,215 acres, at a total annual rental of £511. Under certain conditions a prickly pear lease may be converted to a homestead selection, and six leases of 1,759 acres have been so converted. In 1930 Acts were passed which made these leases convertible into homestead farm, Crown lease or conditional purchase and conditional lease, and the Commissioner was given power to extend leases and reduce rentals and purchase prices as compensation for the clearing of prickly pear lands. Two conversions have been made to homestead farms involving 2,434 acres.

*Suburban Holdings.*

The tenure of suburban holding was introduced in 1912. It is a lease in perpetuity with fixed conditions as to residence and perpetual payment of rent, and may be obtained only in respect of land set apart for that form of holding. Under certain conditions the leaseholder may be permitted to purchase his holding. Transfer otherwise than by way of mortgage requires Ministerial consent. The holding may be protected from sale for debt under certain conditions.

The area of a suburban holding is determined by the Minister for Lands. The rent—minimum 5s. per annum—is calculated at the rate of  $2\frac{1}{2}$  per cent. of the capital value, which is fixed upon notification and may be appraised within five years of confirmation. Subject to fulfilment of all conditions, a perpetual lease grant is issued after the expiration of five years from the date of confirmation. The right to purchase suburban holdings was conferred in 1917.

No rent is chargeable on holdings in course of purchase, the principal with interest at the rate of  $2\frac{1}{2}$  per cent. per annum on the balance being paid by annual instalments extending over a period of ten years. Similar provisions to those relating to the postponement of instalments in the case of conditional purchases (see page 719) apply in respect of suburban holding purchases.

The number of confirmations and purchases of suburban holdings since the introduction of the tenure were as under:—

Year ended 30th June.	Confirmations.		Suburban Holdings in existence at the end of year.*			Suburban Holdings—Purchases approved to the end of the year.	
	No.	Area.	No.	Area.	Annual Rent.	No.	Area.
		acres.		acres.	£		acres.
1912-1931 .....	4,205	84,094	2,241	47,154	5,430	1,012	17,162
1932 .....	107	1,330	2,304	49,099	5,506	1,027	17,357
1933 .....	144	2,072	2,380	51,420	5,592	1,036	17,505
1934 .....	192	2,226	2,547	53,644	5,783	1,043	17,677
1935 .....	95	969	2,339	49,354	5,248	1,059	18,006
1936 .....	119	1,043	2,700	51,114	5,744	1,074	18,294

\* Exclusive of purchases approved.

To 30th June, 1936, deeds of purchase had been issued in respect of 602 suburban holding purchases, embracing 9,311 acres; these are excluded from the foregoing table.

*Residential Leases.*

The holder of a "miner's right" within a gold or mineral field may obtain a residential lease. A provisional rent of 1s. per acre is charged, the maximum area allowed is 20 acres, and the longest term of the lease twenty-eight years; the annual rent is appraised by the Land Board. The principal conditions of the lease are the holding of a miner's right, residence during its currency, and the erection within twelve months of necessary buildings and fences. Tenant-right in improvements is conferred upon the lessee. The holder of any residential lease may, after the first five years of his lease, purchase the land with the consent of the Minister.

There were 531 residential leases, embracing 7,201 acres at a rental of £1,053, current at 30th June, 1936.

*Week-end Leases.*

This tenure, created by the Crown Lands Amendment Act, 1916, is a lease in perpetuity of an area not exceeding 60 acres, subject to payment of rent at the rate of  $2\frac{1}{2}$  per cent. of the capital value, to the effecting of substantial improvements worth £1 per acre within five years from confirmation, and to the performance of such special conditions as may be notified. Residence is not necessary. The minimum rent is £1 per holding. Any adult may apply, but persons who already hold land within the area defined in a notification setting apart the land for week-end leases are generally disqualified.

Week-end leases, on approval by the Minister, may be purchased, and payment must be made within three months from date of demand, or within such further period as the Minister may allow.

Transfers may be made at any time with the Minister's consent, but must be to a qualified person, except in cases of devolution under a will or intestacy. The consideration for a transfer must not exceed the capital value of the improvements on the land.

During the year ended 30th June, 1936, twenty-six leases, with an area of 16 acres, were confirmed. At 30th June, 1936, week-end leases current numbered 106, of an area of 198 acres, and annual rental £111. In addition 76 leases of 498 acres had been made freehold, and approval to purchase had been granted in the case of 93 leases embracing 597 acres.

*Leases of Town Lands.*

Crown lands within the boundaries of any town may be leased by public auction or by tender. The lease is perpetual, and the area included must not exceed half an acre. The amount bid at auction or offered by tender (not being less than the upset value) is the capital value on which the annual rent at the rate of  $2\frac{1}{2}$  per cent. is based for the first period of twenty years. The capital value for each subsequent twenty years' period is determined by the Land Board.

The lease may contain such covenants and provisions as may be gazetted prior to sale or tender. Residence is not necessary. No person is allowed to hold more than one lease, unless with the permission of the Minister on recommendation by the Land Board. The holder of a town lease may be allowed to purchase it.

No town lands leases are now being made available. Up to 30th June, 1936, approval to purchase had been given for 108 lots, embracing 35 acres. On 30th June, 1936, there were 176 leases, containing 66 acres, the annual rental being £111.

*INALIENABLE LEASES.*

The term "inalienable leases" is here used to signify that the statutory conditions attached to the leases so classified do not give the leaseholder the right to purchase any part of his lease nor to convert into another leasehold tenure involving the right of purchase.

On the foundation of the Colony all lands vested in the Crown, and for many years permits to occupy unsold Crown lands were issued on various conditions.

The principal inalienable tenures are described below.

*Forest Leases and Occupation Permits.*

Unoccupied areas and leases situated entirely within dedicated forests are controlled exclusively by the Forestry Commission, which has power to lease or otherwise permit their use for pastoral or other approved purposes.

Forest leases limited to twenty years have been granted for grazing purposes, and occupation permits usually on an annual tenancy, but sometimes for a period of several years, have been granted for grazing, bee-farming, forest saw-mills, and other purposes approved by the Commission. The utilisation of small patches of brush lands, carrying little timber of value, for the purpose of banana-growing under occupation permit has been a recent development. Permits, generally for a term of ten years, are issued, the rentals being fixed to yield £1 per acre in the fourth and subsequent years, when the crops should be in full bearing. Five permits embracing approximately 33 acres were issued in 1935 and none in 1936. For grazing purposes the rent is usually fixed in relation to the carrying capacity of the land.

The area of forest leases and occupation permits wholly within State forests, at 30th June, 1936, was 1,987,346 acres under the Forestry Acts, besides 18,378 acres under the Crown Lands Act administered by the Forestry Commission. In addition, an area of 45,825 acres, consisting of portions of other leases not wholly within State forests, was administered by the Department of Lands.

#### *Snow Leases.*

Vacant Crown lands on the Southern Highlands, which for a portion of each year are usually covered with snow, and are unfit for continuous use or occupation, may be leased by auction or tender as snow leases. This tenure was introduced in 1889 and not more than two snow leases may be held by the same person. The maximum area of any snow lease is 10,240 acres. The term of the lease is fourteen years, and the annual rent is determined by the local Land Board.

At 30th June, 1936, there were 96 leases current, embracing 405,977 acres with an annual rental of £8,639.

#### *Annual Leases.*

Unoccupied lands, not reserved from lease, may be obtained for pastoral purposes as annual leases on application, or they may be offered by auction or tender. No conditions of residence or improvement are attached to annual leases, which do not convey security of tenure, the land being alienable by conditional purchase, auction sale, etc. The area in any one lease is restricted to 1,920 acres, where offered by tender, but in other cases is not restricted. In certain circumstances an annual lease may be converted into a lease under improvement conditions for a term not exceeding ten years.

The area under annual lease fluctuates from year to year, but is diminishing steadily. It amounted to 8,687,837 acres in 1903 and 2,953,296 acres in 1920. The number of annual leases current at 30th June, 1936, was 2,007, embracing 614,786 acres, with an annual rent of £5,519, inclusive of 23 annual leases comprising 18,514 acres in the Western Division.

#### *Mineral and Auriferous Leases.*

Under the Mining Act, the Minister for Mines is empowered to grant certain rights for mining on any lands within the State. These are known as mineral and auriferous leases and generally they take precedence over other forms of tenure. There were 199,060 acres so held

in 1914, and this area gradually increased to 233,538 acres in 1932, but at 30th June, 1936, the land held as mineral and auriferous leases, exclusive of leases to mine on private lands, had decreased in area to 178,838 acres. The area leased in this way is not included in the area covered by other land tenures. Authority may be given to mine under roads and reserves, but at this date there were no lands subject to such authority.

#### *Church and School Lands Leases.*

The history of Church and School lands leases, showing the present status of leaseholders, was published on page 859 of the Year Book for 1921.

The total area of Church and School lands held under lease at 30th June, 1936, in the Eastern Division, was 11 acres, at a rental of £216 per annum.

#### *Occupation Licenses.*

Occupation licenses may be of two kinds (a) preferential occupation licenses, consisting of the land within an expired leasehold area, and (b) ordinary occupation licenses, which relate to the parts of the holdings formerly known as resumed areas. They may be acquired by auction or tender. Occupation licenses extend from January to December, being renewable annually at a rent determined by the Land Board.

An occupation license entitles the holder to occupy Crown lands so granted for grazing purposes, but it does not exempt such lands from sale or lease of any other kind. The licensee, however, retains ownership in improvements on land within the license selected during its currency, and in certain cases is granted tenant-right in improvements which may have been effected with the consent of the Crown or to which the local land board may consider him equitably entitled in respect of areas withdrawn by the Crown.

The area under occupation license (Crown Lands Act) was represented at 30th June, 1936, by 269 ordinary licenses for 983,451 acres, rental £2,410, and 175 preferential licenses, representing 370,468 acres, and rent £2,385. The area occupied in this way was formerly very extensive, being nearly 10,000,000 acres in 1904.

#### *Permissive Occupancy.*

Permissive occupancy is a form of tenancy at will from the Crown, at a fixed rental for a short period, terminable at any time by a written demand for possession from the Secretary for Lands or by written notice from the tenant. The occupant has tenant rights in improvements effected by him.

The number of permissive occupancies in existence at 30th June, 1936, was 8,452, comprising 1,223,944 acres, with a rental of £23,147.

#### CONVERSION OF TENURES.

In describing the various methods of acquisition and occupation, details have been given of provisions of the Crown Lands Act which confer on certain holders of Crown lands the right of conversion into more desirable tenures.

The law as to conversion in relation to the more important forms of tenure may be summarised briefly thus:—

Usually leases covered by a reservation from sale are not available for conversion to a tenure leading to alienation. A conditional purchase may be converted into a homestead farm and conditional leases and special

leases (unless barred) are available for conversion into conditional purchase. Tenures which may be converted into conditional purchase, or conditional purchase and conditional lease, are conditional purchase lease, homestead selection and homestead grant, homestead farm, Crown lease, settlement lease (within certain restrictions) and prickly-pear lease.

A homestead farm may be changed into a conditional purchase lease, conditional purchase with or without a conditional lease, and, in certain cases, a Crown lease; and a homestead farm which is a conversion of a settlement lease may be re-converted to the original tenure. Such tenures as conditional purchase, conditional purchase lease, conditional lease (with basal conditional purchase) homestead selection, homestead grant, prickly-pear lease, and under certain conditions, special lease, are eligible for conversion into homestead farm.

Crown lease may be converted into conditional purchase with or without a conditional lease, and may be obtained by conversion of prickly-pear lease, and in certain circumstances, of homestead farm.

Holders under homestead selection and homestead grant may convert to conditional purchase with or without a conditional lease, conditional purchase lease, or homestead farm, whilst home maintenance areas within improvement, scrub, 18th Section and prickly-pear leases, may be converted into homestead selection.

A special lease, unless barred, may be converted to a conditional purchase, an original or additional conditional purchase lease, a conditional lease, an original or additional homestead selection, a settlement lease, a homestead farm or an additional homestead farm.

Conditional leases, conditional purchase leases, settlement leases and Crown leases are, with some exceptions, convertible to perpetual leases of the same designation.

The following statement shows the number and area of holdings in respect of which conversions were confirmed during 1935-36.

Tenure of Holding Converted.	New Tenure Confirmed.														Total Holdings Converted.	
	Con- ditional Lease.		Conditional Purchase.		Conditional Purchase & Associated Conditional Lease.		Con- ditional Purchase Lease.		Crown Lease.		Home- stead Farm.		Home- stead Selection.			
	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.		
Conditional Lease	...	acres.	143	49,493	...	acres.	...	acres.	...	acres.	11	26,316	...	acres.	154	75,814
Conditional Purchase	...	...	...	...	...	...	...	...	...	...	65	105,482	...	...	65	105,482
Conditional Purchase (Non-residential)	...	...	1	40	...	...	...	...	...	...	...	...	...	...	1	40
Conditional Purchase and Conditional Lease	...	...	...	...	...	...	...	...	...	...	1	2,111	...	...	1	2,111
Conditional Purchase Lease	...	...	1	277	...	...	...	...	...	...	...	...	...	...	1	277
Crown Lease	4	8,122	23	12,022	6	20,078	...	...	...	...	...	...	...	...	33	40,222
Homestead Farm	...	...	5	3,810	1	1,743	...	...	...	33	80,961	...	...	...	39	86,514
Homestead Selection or Grant	...	...	5	895	...	...	...	...	...	...	2	8,733	...	...	7	9,023
Improvement Lease	...	...	...	...	...	...	...	...	...	...	...	...	9	12,500	9	12,500
Prickly Pear Lease	...	...	...	...	...	...	...	...	...	...	2	2,434	...	...	2	2,434
Settlement Lease	3	10,204	4	6,133	3	5,022	...	...	...	...	...	...	...	...	10	21,359
Special Lease	21	10,943	278	29,769	...	...	...	...	1	320	35	25,161	3	1,177	338	67,370
Total	28	29,269	460	102,444	10	26,843	...	...	34	81,281	116	170,237	12	13,767	660	423,841

Particulars of the number and area of new tenures obtained by conversion during each of the past ten years are shown below:—

Year ended 30th June.	New Tenure Confirmed.												Total Confirmations.	
	Conditional Purchase.*		Conditional Purchase and Associated Conditional Lease.		Con- ditional and Condi- tional Purchase Lease.		Home- stead Selection.		Settlement Lease or Crown- Lease.		Home- stead Farm.			
	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.
	acres.													
1927	1,526	734,045	05	209,692	26	12,708	41	181,312	2†	253	11	32,357	1,701	1,120,447
1928	1,432	679,685	164	372,857	34	26,237	57	214,444	5†	18,014	15	41,617	1,707	1,352,854
1929	1,522	833,463	199	565,110	30	14,970	21	63,274	...	...	3	10,078	1,775	1,486,895
1930	1,409	660,110	140	361,972	37	18,968	25	86,570	1†	5,686	3	11,106	1,615	1,144,412
1931	833	296,254	54	141,962	28	13,457	44	181,092	6†	12,838	4	6,206	969	651,790
1932	360	83,075	17	22,657	15	12,759	36	106,101	38	11,121	11	19,428	442	260,231
1933	275	68,645	5	11,060	10	6,009	13	35,673	7†	32,011	9	20,093	319	173,491
1934	397	97,822	6	10,195	19	12,893	13	32,233	10†	31,291	16	38,354	461	222,788
1935	512	111,352	7	9,093	20	9,926	15	30,427	22†	85,172	33	44,978	609	290,948
1936	400	102,444	10	26,843	28	29,269	12	13,767	34†	81,281	116	170,237	660	423,841

\* Including non-residential conditional purchases.

† Settlement Leases.

‡ Crown Leases.

§ 1 Settlement Lease of 128 acres and 2 Crown Leases of 10,993 acres.

The foregoing table includes particulars of leases converted under the original conditions on which they were granted as well as of leases granted under the special conversion privileges allowed by the Acts of 1909 and 1916, and subsequent Acts. For instance, the right to convert conditional leases and conditional purchase leases into conditional purchases was granted when they were first introduced, also the right to convert scrub and improvement leases under certain conditions into homestead selections. On the other hand, the Crown Lands Amendment Act of 1908 conferred on holders the right to convert homestead selections, settlement leases, and non-residential conditional purchases into conditional purchases, while special leases were made convertible into any of a number of tenures with the consent of the Minister.

In 1916 Crown leases and homestead farms which had been created as leases in 1912 were made convertible into conditional purchases, and conversion privileges have been considerably widened by subsequent enactments as indicated in the particulars given in relation to the various forms of tenure.

#### WESTERN LAND DIVISION.

The lands of the Western Division, comprising 80,818,708 acres, or two fifths of the area of the State, are for the most part sparsely settled, and occupation is somewhat precarious on account of the low and uncertain rainfall.

The administration of these lands is regulated by the Western Lands Act, 1901, and prior to 24th August, 1934, was entrusted to the Western Lands Board, comprised of three Commissioners, who sat in open court and exercised the powers conferred on local land boards by the Crown Lands Act. Since that date, when the Western Lands (Amendment) Act, 1934, became effective the administration has been controlled by a single commissioner—the Western Lands Commissioner—assisted by two chairmen of local land board each appointed for a period of ten years. Adminis-

trative districts have been created corresponding to the Pastures Protection districts and a local land board constituted for each district. A board consists of two members—a local representative and one of the chairmen referred to above.

Subject to existing rights and extension of tenure granted under certain conditions, all forms of alienation (other than by auction, improvement purchase, special purchase or exchange), and lease prescribed by the Crown Lands Acts, ceased to operate within the Western Lands Division from 1st January, 1902.

The registered holder of a homestead grant or occupation license in the Western Division, may apply to bring his grant or license under the provisions of the Western Lands Acts. In cases where application has not been made, such grant or license is treated as if the Acts had not been passed. The local land boards constituted under the Western Lands Act function in matters relating to such tenures.

Crown lands within this division are not available for lease until so notified in the *Gazette*, except that leases for special purposes may be granted upon certain conditions. Lands are gazetted as open for lease under specified conditions either for lease generally or for lease exclusively to holders of land under any tenure within reasonable working distance within the Central or Western Divisions.

Leases may be granted in perpetuity or for a term expiring not later than 30th June, 1973; and in certain cases leases which were granted for a shorter term (mostly expiring on 30th June, 1943) may be extended to perpetuity.

Under the Western Lands (Amendment) Act, 1934, leases the majority of which would have expired on various dates from 1943 to 1948 could be extended upon application before 4th January, 1935, for a period of twenty years if within a certain defined area in the north-east of the Division, and for twenty-five years elsewhere in the Division. Leases thus extended became subject to a condition, with certain reservations, that one-fourth of the area of the lease might be withdrawn immediately; a further one-eighth in 1943, and one-eighth in 1948. Two hundred and sixty applications were received for an extension of term in respect of an aggregate area of 30,149,072 acres. The total area withdrawn to 30th June, 1936, was 4,151,742 acres of which 3,311,273 acres had been made available for holdings. Of this area 2,626,894 acres were allotted to 279 applications, two of them being for new or original holdings, and the balance as additionals. The maximum withdrawal areas defined up to 30th June, 1936, include 7,426,451 acres of Western Lands leases and 18,192 acres of Special Western Lands leases, while a further 73,915 acres of freehold will be surrendered to the Crown, making an aggregate area of 7,528,558 acres.

The rent on all leases is determined by the local land board. The minimum annual rent or license fee is 2s. 6d. per square mile or part thereof; the maximum is 7d. per sheep on the carrying capacity determined by the local land board.

Holdings under the Western Lands Acts as at 30th June, 1936, were classified as follow:—

Class of Holding.	Holdings.	area.	Annual Rental.
Western Lands Leases:—	No.	Acres.	£
Perpetual	1,732	31,384,173	38,638
Ordinary	1,770	41,368,703	69,460
Conditional Leases			
Perpetual	34	46,365	315
Ordinary	40	54,187	177
Occupation Licenses	53	374,951	242
Preferential Occupation Licenses	110	1,980,392	4,287
Permissive Occupancy	203	270,167	809
Leases being issued	241	2,238,777	*
Total...	4,183	77,717,715	113,928

\* Rental to be determined by the Local Land Boards.

In addition there were 2,032,850 acres of land alienated, or in course of alienation; 46,262 acres of unoccupied land of low grade; 388,391 acres of unalienated town lands, beds of rivers, commonages, etc., and 133,490 acres of land still under the Crown Lands Acts, yielding annual rentals amounting to £892.

#### PRICKLY PEAR LANDS.

Public attention was first called in Parliament to the growth of prickly pear as a pest in 1882, and in 1885 it was stated that an area of 5,000 acres had become infested in the Upper Hunter district. In 1886 a Prickly Pear Destruction Act was passed, and with some modification in 1901 this remained the law relating to the pest until 1924. The law, however, was not put into operation extensively, and the spread of the pest continued practically unchecked. In 1911 it was estimated that 2,000,000 acres of land were infested and at the end of 1924 the area was stated to be 7,600,000 acres, the greater part of which, however, was lightly infested.

The law was completely revised and the Prickly Pear Act, 1924, was designed to provide means for preventing the further spread of the pest and for eradicating it where possible. This Act (as subsequently amended) related to all lands infested and provided for the appointment of a Commissioner to administer its provisions. It was made an obligation for owners and occupiers of all lands within the State to keep uninfested land entirely free from prickly pear, and all owners and occupiers of freehold or leased lands already infested are required to take reasonable and effective measures to free their lands of prickly pear to the satisfaction of the Commissioner. Amendments of a machinery nature have been made in the principal Act, but the general principles remain unaltered.

The Commissioner classifies land within the State into four grades, according to whether it is free from prickly-pear, lightly infested, heavily infested or very heavily infested. He has power to afford landholders assistance by way of loans or by performing the work at actual cost, or where necessary, partially or wholly cost free; and in addition, purchases poisons and appliances in bulk, so that they may be supplied to landholders at the cheapest possible rates. Entomological measures for combating the infestation are responsible for very substantial progress in its control and eradication, but it has been found advisable to use poison on the scattered

pear to prevent the formation of new dense areas. By agreement with the holder, the terms and conditions of leases of any infested lands leased from the Crown may be varied in any manner approved by the Governor. Action has been taken to clear Crown lands of the pest and those already infested may be leased under the Prickly Pear Act on special conditions.

An owner may divest himself of heavily-infested land, *i.e.*, land of less value than the cost to free it of pear by surrender to the Crown. In such case he must fence off the surrendered portion and maintain within and around it a strip of land free of pear and 10 feet wide. Crown lands classified as very heavily infested may be granted by the Minister to any person who has freed them from pear under agreement.

The Act established a Prickly Pear Destruction Fund by providing for five years from 1st January, 1925, an annual appropriation of £30,000 from Consolidated Revenue, and as from 1st January, 1930, an annual sum not exceeding £30,000. The fund is under the control of the Minister, who is empowered to make grants for the purpose of assisting councils, pastures protection boards, and the trustees of cemeteries, commons, or reserves to meet their obligations under the Act.

The total area of private lands treated by the Commission during the year ended 30th June, 1936, was 198,627 acres, while many thousands of acres were treated by landowners when required to do so by the Commission. In addition 42,870 acres of Crown lands were treated.

The total expenditure during the year ended 30th June, 1936, amounted to £13,060, and there was a credit balance of £6,466 at the close of the year. Particulars of Prickly Pear leases are given on page 730.

#### CLOSER SETTLEMENT.

The circumstances leading to the adoption of what is known as the "Closer Settlement Policy" are described on page 680 of the Year Book for 1928-29. Further reference to the subject may be found in earlier Year Books.

The Closer Settlement Acts provide that the Minister for Lands, with the sanction of the Governor and the approval of Parliament, may purchase private estates at a price approved by Parliament. Any alienated estate whose unimproved value exceeds £20,000 may be compulsorily resumed for closer settlement.

Land comprised in any improvement or scrub lease, or 18th Section lease, may be resumed or purchased under agreement for closer settlement upon the recommendation of the Closer Settlement Advisory Board. To 30th June, 1936, an area of 806,217 acres comprised in 70 long-term leases had been re-acquired in this way at a cost of £200,802, and had been disposed of in 784 farms consisting of homestead farms, homestead selections, special leases, and Crown leases under the Crown Lands Consolidation Act.

Within six months after the passing of an Act sanctioning the construction of a line of railway, the Governor may notify a list of estates within 15 miles of the railway line; within six months of this notification he may notify his intention to consider the advisableness of acquiring for purposes of closer settlement land so notified, the property of one owner, and exceeding £10,000 in value. Proclamations under the Closer Settlement Acts covering 73 estates, aggregating 1,236,843 acres, previously notified, have not yet been cancelled.

At any time after a proclamation of intention to consider the advisableness of acquiring an estate, if an agreement be made that the land shall be subdivided for closer settlement by the owner, the power of resumption may be suspended for a term not exceeding two years. Any sale or lease made under such agreement, and any subsequent sale, lease, or transfer made within five years of the original sale or lease, must be submitted to the Minister, and if it be found that the owner has failed to fulfil the conditions, the suspension of the power of resumption shall cease.

The total area acquired to 30th June, 1936, under the ordinary provisions of the Closer Settlement Acts, was 1,274,298 acres, at an aggregate purchase price of £5,087,608. This area, originally consisting of 69 estates, was divided into 3,161 farms. No estates were acquired under these provisions during the year ended 30th June, 1936. Particulars of the provisions of the earlier Closer Settlement Acts and details of the operations thereunder are given in earlier Year Books.

### *Closer Settlement Promotion.*

The provisions of the Closer Settlement Acts of 1918 and 1919, which replaced the Closer Settlement Promotion Act, 1910 (repealed), enable three or more persons, or one or more discharged soldiers, each of whom is qualified to hold a settlement purchase, to negotiate with an owner of private lands, and under certain conditions to enter into agreements with him to purchase a specified area on a freehold basis, for a price to be set out in each agreement. Any one or more discharged soldiers or sailors may also enter into agreements to purchase on a present title basis from the holder, a conditional purchase; a conditional purchase lease; a conditional purchase and conditional lease, including an inconvertible conditional lease; a homestead selection; a homestead farm; a settlement lease; a Crown lease, or any part of one or more of such holdings, or an improvement or scrub lease, not substantially more than sufficient for the maintenance of a home.

Upon approval by the Minister, the vendor, in the case of private land, surrenders the area to the Crown, and the purchaser acquires it as a settlement purchase. In the case of land acquired on present title basis, the vendor transfers it to the purchaser. The vendor is paid by the Crown, either in cash or in Closer Settlement Debentures. The freehold value of the land, inclusive of improvements thereon, purchased for any one person must not exceed £3,000, except in special cases where the improvements warrant it, when the freehold value may be up to £3,500; if the land is found suitable for grazing only, the freehold value may be up to £4,000.

Each farm is worked independently, the co-operation of the applicants ceasing with the allotment of an area. Each applicant must lodge a deposit of 5 per cent. of the capital value of the holding except returned soldiers and sailors, who are not required to make a deposit. The deposit is applied wholly in the reduction of the capital value. The balance of purchase money is paid by equal annual instalments, usually 5 per cent. of the capital value, including principal and interest, the latter at the rate of 4 per cent. on the amount outstanding. If an initial deposit be paid and instalments at their due dates the debt may be liquidated in 37 years. The balance of purchase money or any number of instalments may be paid at any time. Postponement of the payment of instalments and of interest may be sanctioned in special circumstances; also holders of farms may obtain advances from the Rural Bank Commissioners on account of improvements effected.

Prior to 1st January, 1933, the amounts of deposit and instalments varied from 5 per cent. to 6½ per cent. of the capital value according to the date of purchase. Fuller particulars are given on page 881 of the Year Book for 1933-34.

The term of residence on a settlement purchase is five years and should begin within six months of confirmation of the application. Commencement of residence, however, may be deferred on certain conditions for a period not exceeding five years. With permission of the land board the residence condition may be performed in an adjacent village or town or on another holding held by the purchaser within reasonable working distance. Under special circumstances it may be remitted or suspended.

Permanent improvements to the extent of 10 per cent. of the capital value must be effected within two years of the commencement of the title, and an additional 15 per cent. within the next three years. Improvements on the land at the date of application are held to fulfil this condition to the amount of their value.

Grant is issued on the payment of the balance of purchase money and interest, together with the deed fee and stamp duty, subject to the issue by the land board of their certificate that all conditions have been fulfilled.

At 30th June, 1936, 1,653 estates with an aggregate area of 1,823,333 acres had been acquired at a total cost of £8,480,135 under the promotion sections of the Closer Settlement Acts. This area was divided into 3,960 farms. There were no transactions under these provisions during 1935-36.

#### *Summary of Closer Settlement Operations.*

Exclusive of irrigation projects, 1,845 estates and leases have been acquired by the Government for purposes of closer settlement of civilians and returned soldiers. These estates embraced 4,028,694 acres, for which the purchase price was £14,568,595, and there were added 205,173 acres of adjacent Crown lands. The total number of farms made available was 8,967.

The following table provides a summary of the various operations to 30th June, 1936, including lands acquired and administered under the Closer Settlement and Returned Soldiers' Settlement Acts, lands acquired by executive authority and by virtue of section 197 of the Crown Lands Act, and administered by the Department of Lands, including long-term leases acquired under Closer Settlement Act, 1912, and disposed of under the Crown Lands Act.

Mode of Acquisition.	Estates Acquired	Area.		Price paid for Acquired Land.	Farm blocks made available.		
		Acquired.	Adjacent Crown Lands.		No.	Area.	Value.
	No.	acres.	acres.	£		acres.	£
Direct Purchase ...	30	90,164	44,484	506,855	686	309,672	1,331,018
Crown Lands Act (s. 197)*	23	34,682		293,195	376		
Closer Settlement Act—							
Promotion Provisions...	1,653	1,823,333	13,173	8,480,135	3,960	1,835,184	8,345,738
Ordinary Provisions ...	69	1,274,293	113,195	5,087,608	3,161	1,443,498	6,559,788
Resumption of Long Leases† ...	70	806,217	34,321	200,802	784	639,151	765,254
Total ...	1,845	4,028,694	205,173	14,568,595	8,967	4,127,505	16,001,798

\* Including one estate of 21,309 acres, surrendered at nominal value for returned soldiers.

† Including 19,646 acres of improvement lease, and 160,028 acres of scrub lease acquired at nominal value.

The number of estates acquired under the promotion provisions of the Closer Settlement Act is comparatively large, because 953 individual holdings, besides holdings containing only a few farms, were acquired mainly for soldier settlers. In some cases two or more farm blocks have been amalgamated and made available as one farm.

The disposal of the lands covered by the foregoing table as at 30th June, 1936, is shown below. The figures include a number of small blocks made available as town lots, etc., and not as farms.

Manner of Disposal.	No. of Blocks.	Area.	Capital Value.
		acres.	£
Holdings alienated or in course of alienation by settlement purchase, group purchase, auction, tender, etc. ... ..	9,210	4,246,212	14,258,470
Holdings which have reverted to the Crown and await disposal ... ..	185	55,738	288,611
Unallotted farms (including provisionally allotted, under cultural system, or never allotted) ... ..	115	1,396	34,128
Areas retained for roads ... ..	...	33,941	117,101
Areas appropriated for railway purposes... ..	...	1,737	6,893
Areas retained for reserves ... ..	...	37,489	88,195
Vacant village lands, remnant areas, etc. ... ..	...	28,067	136,548
Total ... ..	9,510	4,404,580	14,929,946

The amount paid in respect of principal and interest during the year ended 30th June, 1936, was £594,564, making the total to that date £9,827,042. Accounts have been paid in respect of approximately 49 per cent. of the 6,982 settlement and group purchase farms in existence.

Interest payments amounting to £1,928,194 have been postponed to the end of the term free of interest, and interest amounting to £59,023 in the instalments has been waived. These concessions were made in respect of 5,073 settlers, including 1,083 who applied for special relief on account of loss through flood, fire, drought, etc.

#### *Appraisement of Capital Value.*

The Crown Lands and Closer Settlement (Amendment) Act, 1931, enabled holders of land under the Closer Settlement Act to apply for the appraisement of the capital value of their holdings not later than 2nd October, 1935. Of the 5,138 applications received, 4,933 had been finalised by the local land board at 30th June, 1936, the aggregate capital value being reduced from £12,017,470 to £9,934,070, or by 17.3 per cent.

#### *Other Closer Settlement Operations.*

Between April, 1923, and November, 1929, the Rural Bank operated a scheme of advances to facilitate subdivision of private estates, and the first Rural Bank loan of £1,000,000 at 5½ per cent. was raised locally for the purpose.

Under this scheme the Bank, after inspection, issued certificates as to the amount it was willing to advance to purchasers of land under subdivisional plans approved by the Land Settlement Board and the Bank. Interest was charged at the rate of  $6\frac{1}{2}$  per cent., and the maximum advance was £3,000, or two-thirds of the Bank's valuation of the property, whichever was the less. In the case of properties not fully improved the advance might be as great as 80 per cent. of the Bank's valuation, subject to specified improvements being carried out at the purchaser's expense.

By 30th June, 1930, Rural Bank certificates had been issued in connection with the proposed subdivision of 175 estates into 755 farms, containing 608,443 acres, valued at £2,464,951. The amount of loans covered by the certificates was £1,800,345. Altogether 754 farms, covering 608,251 acres, had been selected under the scheme. During the operation of the scheme the Rural Bank granted 736 loans in respect of 745 farms for an amount of £1,762,340.

#### *Closer Settlement Policy.*

The Closer Settlement policy involves the voluntary subdivision of large estates supplemented by the acquisition by the Government of selected properties, either by purchase or compulsory resumption. The main objective will be to provide farms in "safe" districts where the settler may have a variety of sources of income—wheat or other cereal crops, sheep, fat lambs, dairying and pigs, etc. The three essentials to success are as follows, viz:—

- (a) the selection of the right type of settler, having regard to his experience and resources;
- (b) the selection of suitable land which does not load the settler with excessive annual costs; and
- (c) the selection of districts in which soil and rainfall make possible diversified production.

To encourage voluntary subdivision, the Government has formulated a scheme in conjunction with the Rural Bank of New South Wales, by which the bank in approved cases, will advance up to  $66\frac{2}{3}$  per cent. of the valuation and to which the Government will add a supplementary advance of  $13\frac{1}{3}$  per cent. Voluntary subdivision in itself, however, has proved insufficient to satisfy the legitimate demand for land and will be supplemented by the acquisition of suitable estates by purchase or resumption under the provisions of the Closer Settlement Acts, or otherwise. Land so acquired will be subdivided and made available for closer settlement.

Special assistance will be made available to qualified settlers during the early years of their tenure by the institution of a system of interest charges on a graduated scale ranging from 1 per cent. per annum in the first year to 4 per cent. per annum in the sixth year, the purpose being to offset the expenditure incurred on necessary farm improvements.

Legislation will be necessary to give effect to these proposals.

Reference to the settlement purchase tenure is made on pages 740 and 741.

## SETTLEMENT OF RETURNED SOLDIERS.

To 30th June, 1936, farms had been allotted by the Department of Lands to 9,652 returned soldiers, and there remained 4,940 returned soldier settlers on an area of 7,579,240 acres, approximately half of which was in the Western Division. These totals exclude 703 soldier settlers on private lands, to whom advances only were made. The total expenditure is shown below:—

	£
Acquisition of holdings for settlement ..	8,113,956
Advances to settlers .. .. .	3,194,424
Developmental works .. .. .	1,885,124

Part of the expenditure for developmental works shown above was formerly included under the heading "Advances to Settlers."

Under the Returned Soldiers' Settlement Acts, special provision is made for the settlement of discharged soldiers on Crown lands, including the Murrumbidgee Irrigation Areas, and on lands acquired under the Closer Settlement Acts and otherwise.

Land has been made available principally under the following tenures:—

1. Homestead Farm.—Lease in perpetuity.
2. Crown Lease.—Lease for 45 years or lease in perpetuity.
3. Returned Soldiers' Special Holding—Purchase or lease in perpetuity.
4. Suburban Holding—Purchase or lease in perpetuity.
5. Irrigation Farm.—Purchase or lease in perpetuity.
6. Group purchase.
7. Settlement purchase.

Provision also exists in the Closer Settlement Acts under which one or more discharged soldiers may purchase privately-owned land upon terms approved by the Minister for Lands, the Crown providing the whole of the purchase money. Transactions of this nature are permitted only in cases in which additional settlement is provided. The Minister has discretionary power to refuse any such proposal. Operations have been restricted in recent years by the limited funds made available by Parliament, and activities were suspended in 1931.

An advance not exceeding £625 may be made available for each soldier settler, but it must be used only for the general improvement of the land, purchase of implements, stock, seed, and other necessities, or in the erection of buildings. Repayment of advances towards the cost of buildings and permanent improvement is effected by annual instalments extending over twenty-five years, interest being charged only during the first five years; in the case of stock and implements the period is ten years with interest charged only during the first year. Interest may not exceed 2½ per cent. for the first year and 4 per cent. per annum thereafter.

Under special circumstances advances in arrears may be funded and made payable over the balance of the period allowed for the repayment of the original advance; also interest in arrears may be funded and made payable over an extended term.

The total amount advanced by the Department of Lands under the Returned Soldiers' Settlement Act to 30th June, 1936, was £3,194,424, of which £1,653,057 had been repaid. Total interest paid to that date amounted to £647,139.

The following table affords a summary of the number, area, and cost of private estates acquired by the Department of Lands for soldiers' settlement to 30th June, 1936:—

Class of Acquisition.	Estates.	Area.	Purchase Money.	Farms made available
	No.	acres.	£	No.
Promotion Provisions Closer Settlement Acts* ...	1,457	1,198,502	5,578,946	2,282
Group Settlement—Closer Settlement Acts ...	25	396,061	1,809,729	837
Section 197, Crown Lands Act† ...	22	30,491	274,334	352
Direct Purchase under authority of Executive Council ...	27	85,218	450,947	538
Total ... ..	1,531	1,710,272	8,113,956	4,009

\*Includes 953 single farms. † Includes one estate surrendered at nominal value, practically as a gift.

There have been no transactions since 1st July, 1928.

Particulars of the expenditure by the Water Conservation and Irrigation Commission in respect of the settlement of returned soldier's to 30th June, 1935, are as follows:—

	£
Acquisition of holdings for settlement ..	45,582
Developmental works .. ..	1,587,446
Advances to soldier settlers .. ..	2,751,582

There was no expenditure by the Commission in respect of the first two items during 1935-36, consequently the totals given remained unchanged as at 30th June, 1936. The Commission ceased to make advances to irrigation settlers from 1st July, 1935, when this function devolved upon the Irrigation Agency of the Rural Bank. As particulars of advances made to soldier settlers in irrigation areas are not available for 1935-36, the total to 30th June, 1936, is not known.

#### IRRIGATION AREAS.

Four irrigation areas are being developed within the State, the most extensive the Murrumbidgee Irrigation Area in the basin of the river of that name, the Coomealla Irrigation Area near Wentworth and two smaller settlements at Hay and Curlwaa.

The Murrumbidgee Area comprises 374,000 acres, of which 318,470 acres are held under various tenures. Approximately 78 per cent. of the total area is used for farming purposes. The Coomealla Irrigation Area situated on the Murray River about 9 miles from Wentworth comprises 25,450 acres and the two smaller settlements at Hay and Curlwaa 6,456 and 10,550 acres respectively. All are under the control of the Water Conservation and Irrigation Commission.

*Murrumbidgee and Coomealla Irrigation Areas.*

Under the provisions of the Crown Lands Consolidation Act, 1913, land within these areas is made available for disposal by purchase in fee simple (freehold) or by lease, notification of the conditions and terms of sale or lease being published in the *Government Gazette*. The principal freehold tenures are irrigation farm purchase, non-irrigable purchase, and town land purchase. Payment of the purchase money in these cases is made by an initial deposit of five pounds and thereafter by half-yearly instalments including principal and interest, the latter being at the rate of 4 per cent. per annum on 30th June, 1936. Payment may extend over seventy-three and twenty instalments respectively in the cases of irrigation and town purchases; in the case of a non-irrigable purchase over the period notified in the *Gazette*.

Perpetual leases are held under three tenures—irrigation farm lease, non-irrigable lease, and town land lease. The term of these leases, as the designation indicates, is in perpetuity. The rental as notified in the *Gazette* applies for the first twenty-five years only, in the case of a town land lease, a non-irrigable lease not used for farming purposes or an irrigation farm lease which is chiefly suitable for residential purposes. For each succeeding period of twenty years the amount will be that agreed upon by the Commission and the lessee as the fair market annual rental value of the land leased irrespective of any improvements thereon. Failing agreement within a specified time the amount will be determined by the Special Land Board. The determination of the Board, however, is subject to appeal or reference to the Land and Valuation Court. The annual rent is determined similarly for the balance of the current period in the case of a town land lease or a non-irrigable lease not used for farming purposes, transferred or otherwise disposed of within the first fifteen years.

Water rights attach to each irrigation farm purchase or lease, the number varying with the type and area of holding. Of these a certain proportion is a fixed charge which must be paid notwithstanding that a less number may have been used. In some instances, however, the fixed charge is made for all the water rights attached.

Residence, if a condition of the tenure, must commence within six months of the date on which the application for land was granted, and with the consent of the Commission may be performed by a tenant, employee or agent of the holder or by one or more joint holders. This condition does not attach to a town land lease, town land purchase, non-irrigable lease, or non-irrigable purchase, provided that in the two latter cases it has been so notified in the *Gazette* making the land available for disposal. Suspension of the residence condition may be allowed if the Commission is of the opinion that circumstances so warrant.

The holder must effect improvements of a certain value on the land within a period determined by the Commission, and will be released from the residence condition when the Commission has certified that these im-

improvements have been made. The Commission, however, may refuse to certify to this effect if it is of the opinion that the land is not being developed satisfactorily or does not provide sufficient security for monies owing. Payment is made in respect of existing improvements on the terms notified in the *Gazette*.

A perpetual lease may be converted to a purchase, subject to certain provisions, if the holder has complied with the conditions of the lease. In the following cases, relating to areas in excess of 5 acres, conversion takes effect from the date of receipt by the Commission of the notification by the holder of his intention to convert, and the purchase money is determined at twenty times the annual rental of the lease at the date of conversion, viz., (a) conversion of an irrigation farm lease to an irrigation farm purchase, and (b) conversion of a non-irrigable lease used for farming to a non-irrigable purchase. In all other cases, i.e., town land lease, irrigation farm lease 5 acres or under, and non-irrigable leases not used for farming purposes, the purchase amount will be the sum agreed upon by the Commission and lessee, or failing agreement within the time specified, the amount determined by the Special-Land Board. Appeal, however, may be made to the Land and Valuation Court against the determination of the Board. Conversion takes effect thirty days after the date of agreement between the Commission and lessee or the determination of the Special Land Board or of the Land and Valuation Court, as the case may be.

Grant is issued to a holder of a lease, the term of which is in perpetuity, when the Commission is satisfied that all conditions, including any requirement to effect improvements to a certain value, have been fulfilled.

Crown grant (freehold) is issued in respect of a purchase upon payment of the purchase money and interest together with deed fee, stamp duty, and money owing for Crown improvements, provided that all conditions relating to residence and improvements have been fulfilled to the satisfaction of the Commission.

A certificate of conformity may be obtained in respect of any purchase for production to financial institutions or intending purchasers as an assurance that all conditions in connection with the land, except payment of the purchase money, have been fulfilled.

A holding may be transferred with the consent of the Commission in accordance with the provisions of the Crown Lands Consolidation Act and subject to the following conditions, viz.:—(a) That all money owing to the Rural Bank, the Commission, or the Crown in respect of the holding, or such portion as may be required to be paid, has been paid, (b) that the proposed transferee signs an agreement that the amount owing in respect of the holding, etc., will be paid by him and that he will execute such security as the Commissioner or Rural Bank require for the payment of such money, and (c) that the security referred to has been executed by the transferee.

The holder of an irrigation farm purchase or a non-irrigable purchase used for farming purposes may acquire by transfer by way of sale any other irrigation farm purchase or non-irrigable purchase used for farming purposes, which in either case exceeds 5 acres, without the consent of the Commission where neither party to the transfer is indebted to the Crown or Commission. Also consent is not necessary in the following cases, viz., (a) transfer of a town land lease or purchase, and (b) a mortgage, release of mortgage, transfer by way of mortgage, transfer by way of release of mortgage, or transfer of mortgage.

The Irrigation Act provides that land within the Murrumbidgee or Coomealla Irrigation Areas which has not been set apart, set apart but not disposed of, or which upon forfeiture or surrender becomes revested in the Crown may be used for such purposes or leased upon such terms and under such conditions as the Minister approves.

#### *Hay Irrigation Area.*

Land in this area is administered under the Hay Irrigation Act and the Irrigation Act, 1912, as amended by subsequent Acts. Irrigated leases extend over thirty years and may be converted to purchases on terms extending over thirty-six and a half years. In such a case the purchase price is the amount agreed upon by the Commission and the lessee, or failing agreement within the time specified, the amount determined by a Board constituted for that purpose. Appeal lies from the determination of the Board to the Land and Valuation Court. Each lessee, purchaser, or owner of an irrigated holding is entitled to 24 inches of water per acre per annum. The water rate, which is subject to alteration, was £1 per acre per annum at 30th June, 1936.

Non-irrigated holdings may be held on short lease, in most cases up to five years. Water for stock purposes may be supplied in quantities and at charges agreed upon with the Commission.

Holdings may be transferred with the consent of the Commission.

#### *Curlwaa Irrigation Area.*

Land in this area is administered under the Wentworth Irrigation Act and the Irrigation Act, 1912, as amended by subsequent Acts. Irrigated and short leases are similar to those of the same designation in the Hay Irrigation Area, and holdings may be transferred with the consent of the Commission. Every lessee, purchaser or owner of an irrigated holding is entitled to receive 30 inches of water per acre per annum at an annual charge of £1 per acre, but no water rates are charged for areas defined by the Commission as non-irrigable land or unsuited for irrigation. In addition a general rate of 14s. per acre per annum is imposed on the irrigable area considered suitable for planting of fruit trees or vines. Water may be supplied to non-irrigated holdings or those under permissive occupancy for stock and other purposes by special agreement with the Commission.

*Alienation and Occupation of Land within Irrigation Areas.*

The following table gives particulars of the alienation and occupation of land within the Irrigation Areas on 30th June 1936:—

Land Tenure.	Irrigation Areas.									
	Murrumbidgee.		Coomoella.		Curlwaa.		Hay.		Total.	
	Holdings.	Area.	Holdings.	Area.	Holdings.	Area.	Holdings.	Area.	Holdings.	Area.
<i>Alienated.</i>	No.	acres.	No.	acres.	No.	acres.	No.	acres.	No.	acres.
Irrigation Farm Purchases ...	3	56	...	...	...	...	...	...	3	56
Irrigated Purchase Lots ...	...	...	...	...	...	...	1	10	1	10
Non-irrigable Purchases ...	4	4	1	2	...	...	...	...	5	6
Town Land Purchases... ..	24	19	...	...	...	...	...	...	24	19
Total alienated ... ..	31	79	1	2	...	...	1	10	33	91
<i>In Process of Alienation.</i>										
Irrigation Farm Purchases ...	182	58,086	119	2,285	...	...	...	...	301	60,071
Non-irrigable Purchases ...	17	3,191	...	...	...	...	...	...	17	3,191
Town Land Purchases... ..	91	43	9	1	...	...	...	...	100	44
Total in process of alienation	290	61,920	128	2,286	...	...	...	...	418	64,206
<i>Held under Perpetual Lease.</i>										
Irrigation Farm Leases ...	1,743	178,480	11	83	...	...	...	...	1,754	178,563
Non-irrigable Leases ...	106	21,158	...	...	...	...	...	...	106	21,158
Town Land Leases ... ..	1,151	288	3	1	...	...	...	...	1,154	289
Total under Perpetual Lease	3,000	199,926	14	84	...	...	...	...	3,014	200,010
<i>Other Occupation.</i>										
<i>Leases—</i>										
Short Leases ... ..	...	...	...	...	83	7,243	63	3,975	146	11,218
Thirty-year Leases ... ..	...	...	...	...	166	2,222	93	885	259	3,107
Leases under Irrigation Act... ..	398	46,085	57	31,417	...	...	...	...	455	77,502
<i>Permissive Occupancy—</i>										
Farming Lands ... ..	42	10,282	24	490	...	...	...	...	66	10,772
Non-irrigable Land not used for farming ... ..	8	28	...	...	...	...	...	...	8	28
Town Lands ... ..	19	45	5	2	...	...	...	...	24	47
Other ... ..	34	105	37	105	...	...	19	466	90	676
Total under Lease (other than Perpetual Lease), etc.	501	56,545	123	32,014	249	9,465	175	5,326	1,048	103,350
Unoccupied Land ... ..	...	55,530	...	1,064	...	1,085	...	1120	...	58,799
Total Area... ..	...	374,000	...	35,450	...	10,550	...	6,456	...	426,456

The total area of alienated land acquired by the Crown for water conservation and irrigation purposes was 219,800 acres on 30th June, 1936.

*Land outside Irrigation Areas.*

Land vested in the Commission but outside of the irrigation areas may be leased on such terms and under such conditions as the Commission may impose. At 30th June, 1936, land of this nature was comprised in ninety-nine holdings with an aggregate area of 20,219 acres held under miscellaneous leases.

*Relief to Settlers in Irrigation Areas.*

Prior to the passing of the Irrigation (Amendment) Act, 1926, the maximum period allowed for the suspension of payment of monies due or owing to the Crown or the Water Conservation and Irrigation Commission was four years and for the repayment of such monies sixteen years.

Under this Act the Commission was authorised to extend these periods and was vested with the following powers, viz.—(1) to remit payment of rent and charges for water and interest; (2) to exempt an occupier from the payment of similar charges to become due; (3) to reduce the rate of interest charged in respect of advances to soldier settlers; and (4) to reduce the indebtedness of settlers in respect of their holdings to a sum based on the productive capacity of the holdings and to write off the balance of debt with interest thereon. The Act also provided (1) that the occupier of any holding subsisting on 23rd December, 1924, might apply to have the capital value (twenty times the annual rental), determined by the Special Land Board, subject to appeal to the Land and Valuation Court; and (2) that soldier settlers might appeal to the Land and Valuation Court against determinations of the Commission, particularly in respect of indebtedness.

As a result of investigations conducted by classification committees specially constituted to consider cases both of civilian and soldier settlers, debts were re-determined on the basis of the productive capacity of the holdings and additional area was granted to many settlers, while in some instances settlers were transferred to new holdings and their debts adjusted. The basic period for discharge of indebtedness was twenty years, but in some cases up to thirty-five years was allowed.

The position of irrigation settlers was further reviewed under the Irrigation (Amendment) Act, 1931, and their indebtedness reduced where warranted. Settlers were permitted to apply for re-determination of rentals of holdings which had been granted subsequent to 23rd December, 1924, in accordance with the recommendations of the classification committees previously referred to. The same concessions were extended to settlers indebted to the Rural Bank of New South Wales, as to those directly indebted to the Crown or to the Commission.

Interest rates were reduced to 4 per cent. per annum as from 1st January, 1933, under the Crown Lands (Amendment) Act, 1932, and land rentals were reduced by 22½ per cent. for a period of three years from 1st January, 1933; this period was extended to six years by the Crown Lands (Amendment) Act, 1935.

The Murrumbidgee Irrigation Areas Occupiers Relief Act, 1934, was a measure mainly rendered necessary by the continued depression and provided for the adjustment of settlers' debts to the Crown and for the adjustment of rent, review of water charges, and variation of conditions attaching to leases and purchases. Debts due on or before 1st January, 1933, which had not been paid were referred to as "arrears of indebtedness," while debts owing but which had not become payable on that date were referred to as "current indebtedness." Arrears of indebtedness might be reduced by the Minister during the year ended 30th June, 1935, in such proportion as he considered fit and he might direct that a specified amount or proportion of such debt be deemed to be and treated as current indebtedness. Current indebtedness was reduced by 33½ per cent. during the year ended 30th June, 1935, and, except with respect to the payment of the balance

of purchase money, was payable by equal half-yearly instalments (including interest at 4 per cent. per annum) extending over twenty-seven years commencing on 30th June, 1933. It was provided, however, that the reduction would not apply in cases where the indebtedness had already been adjusted, having regard to economic conditions and the value of farm products. Annual rentals were reduced by 33½ per cent., such reduction being in place of, but not in addition to, the reduction of 22½ per cent. under the Crown Lands Act, 1932. Clauses in the Act empowered the Minister to deal with anomalous cases during the year ended 30th June, 1935, by giving concessions beyond those mentioned above, when he considered special treatment was warranted.

*Rural Bank of New South Wales—Irrigation Agency.*

An Irrigation Agency has been established as a department of the Rural Bank of New South Wales in accordance with the provisions of the Rural Bank (Agency) Act, 1934, and has functioned since 1st July, 1935.

The bank is empowered to make loans through the agency to persons holding land in an irrigation area upon such security, at such rates of interest and subject to such covenants and conditions as it may impose.

The Act also provided that certain monies owing to the Water Conservation and Irrigation Commission on 1st July, 1935, became monies owing to the bank. In these were included rents, monetary advances and interest in respect of land occupied in the Murrumbidgee, Hay, Cuthwaite and Coomealla Irrigation Areas, and amounts outstanding on account of shallow bores sunk by the Commission and in respect of water supplied to holdings within Domestic and Stock Water Supply and Irrigation districts.

LAND RESUMPTIONS AND APPROPRIATIONS.

Alienated land required by the State may be obtained by resumption, purchase, exchange, surrender, or gift. Resumptions are made under the Public Works, Lands for Public Purposes Acquisition, and Local Government Acts, and except when made for purposes of Public Instruction or Railways they are treated by the Valuer-General. Resumptions for Federal purposes are made under the Commonwealth Lands Acquisition Act, 1906-16, Lands Acquisition (Defence) Act, 1918, and War Service Homes Act, 1918-20. Any Crown lands may be appropriated for public purposes.

The following statement shows the area of resumptions and appropriations and of the principal purchases which were made during the past five years. Purchases of land for semi-public purposes are not included.

Year ended 30th June.	Resumptions and Purchases.			Crown Lands Appropriated.			Gifts.			Total.		
	a.	r.	p.	a.	r.	p.	a.	r.	p.	a.	r.	p.
1932	458	2	24	107	0	1	3	1	39	569	0	24
1933	2,091	1	20	135	2	4	12	2	32	2,239	2	16
1934	1,370	3	4	227	3	39	7	2	14	1,606	1	17
1935	1,316	1	9	987	1	27	7	0	10	2,310	3	6
1936	1,271	2	3	4,175	2	17	2	29		5,447	3	9

The purposes of resumptions, appropriations, and purchases during 1935-36 were:—

				Area.					Area.
				a. r. p.					a. r. p.
Aerodrome	...	...	...	44	0	36	Shires and Municipalities—		
Bridge	...	...	...	0	0	13	Drainage	...	0 0 27
Cathedral Site	...	...	...	0	1	15	Garbage Tip	...	4 3 6
Council for Scientific and	...	...	...	...	...	...	Parks	...	4 0 6
Industrial Research	...	...	...	800	0	0	Public Reserve	...	0 3 27
Defence	...	...	...	0	0	22	Quarry	...	3 2 7
Drainage	...	...	...	0	1	31	Recreation	...	13 2 7
Harbour Improvements	...	...	...	251	0	0	Roads	...	16 2 34
Hospitals	...	...	...	1	2	31	Sub-station	...	0 0 20
Jetty	...	...	...	0	0	17	Town Improvements	...	4 1 13
Main Roads	...	...	...	26	1	10	State Forest	...	3,529 2 0
Police Station	...	...	...	1	2	22	Water Conservation and Irriga-	...	...
Postal	...	...	...	0	1	0	tion	...	0 2 23
Public Schools	...	...	...	233	0	29	Water Supply	...	332 0 28
Railways—	...	...	...	...	...	...	Weir	...	64 3 16
Electric Trans. Lines	...	...	...	18	2	25	Total		
Workshops	...	...	...	11	1	5	...	...	5,447 3 9
Reservoir	...	...	...	6	2	21			
Sewerage	...	...	...	76	1	38			

Land resumptions, purchases, and gifts in quinquennial periods from the year 1904-05, inclusive, and for the year ended 30th June, 1936, were as follow:—

Period.	Resumptions, Appropriations, and Purchases.			Gifts.			Total.		
	a.	r.	p.	a.	r.	p.	a.	r.	p.
1905-09	105,848	3	8	439	1	27	106,288	0	35
1910-14	282,008	3	17	117	0	10	282,125	3	27
1915-19	64,194	0	35	81	0	35	64,275	1	30
1920-24	84,046	1	6	91	1	32	84,137	2	38
1925-29	25,857	2	35	63	0	26	25,920	3	21
1930-34	12,778	1	21	61	1	28	12,839	3	9
1935-36	5,447	0	20	2	29		5,447	3	9

The total area of land dealt with in this way between 1890 and June, 1936, was approximately 604,563 acres, including about 295,030 acres for water conservation and irrigation projects, 53,111 acres for defence, 59,692 acres for railways and tramways, 33,534 acres for town water supplies, and 89,000 acres for closer settlement.

#### REVENUE FROM PUBLIC LANDS.

The revenue received from public lands during recent years is shown in the chapter, Public Finance, of this Year Book.

## FOOD AND PRICES.

### FOOD SUPPLY AND DISTRIBUTION.

The principal food commodities consumed in New South Wales are meat—mainly beef and mutton—bread, potatoes, milk, butter, eggs, sugar and jam. Tea is the popular beverage. Ample supplies of these commodities are produced within the State, except that tea is imported from tropical countries, and the local production of potatoes and sugar, and, to a smaller extent, eggs is augmented by importation from other Australian States. A wide variety of vegetables and fruit is consumed, but the consumption of fish, cheese and coffee is comparatively small.

The governing authorities have statutory power to supervise the conditions under which food is produced and distributed, and to ensure a reasonable standard of quality. The Pure Food Act prohibits the sale or exhibition for sale of food which is adulterated or falsely described. It prescribes that packages must be labelled with the true description and weight of the contents and the name of the maker or vendor.

The administration of the food laws in incorporated areas is primarily the duty of the Board of Health, but the function may be left to the municipal and shire councils. If a council fails to fulfil the duty satisfactorily, the Board itself may exercise its powers in respect of these matters, or may take steps to compel the council to act.

Standards for the composition, purity, and quality of foods are prescribed by regulations under the Pure Food Act. With a view to securing uniformity throughout Australia, the regulations have been standardised so far as the divergence of the laws of the various States will permit. The Commonwealth Department of Trade and Customs exercises supervision in regard to the composition and labelling of food and of drugs imported into Australia.

In the matter of distribution of food supplies, the local governing authorities in the incorporated areas of New South Wales are authorised to establish public markets and to regulate the hawking and peddling of food commodities within the area of their jurisdiction.

The Municipal Council of Sydney has established large markets in the city for vegetables, fruit, farm produce, fish, and poultry, also cold storage works. The business conducted at the markets consists for the most part of sales by producers or their agents to retail traders. The area and cost of the markets are as follows:—

Market.	Floor Space.	Cost of Market.	Market.	Floor Space.	Cost of Market.
	sq. ft.	£		sq. ft.	£
Vegetable ...	95,560	129,101	Poultry ...	12,200	32,919
Produce ...	45,300	74,354	Fish ...	47,517	35,275
Fruit ...	146,300	198,147			

The cold storage works have been constructed with chilling and freezing rooms for the storage of fruit, dairy and farm produce, mutton and rabbits, and the cost was £59,996. The total storage capacity is 200,000 cubic feet.

Outside the city area the local governing bodies have made little use of their powers in relation to the establishment of markets.

The operations of agents selling on commission farm produce, such as vegetables, fruit, eggs and poultry, are subject to the Farm Produce Agents Act, 1926-1932. They are required to be licensed, and to furnish to the Registrar appointed under the Act a substantial bond from an approved insurance company.

Another measure relating to the marketing of food products, with the main purpose of assisting producers, is the Marketing of Primary Products Act, 1927-1934, which authorises the formation of marketing boards in respect of primary products upon the request of the producers. A board for any product may not be formed unless a poll be taken of the producers thereof, and votes are given by at least three-fifths of those entitled to vote, and more than half the votes are in favour of its constitution. The legislation was amended in 1934 to remove the possibility of conflict with the provisions of the Constitution Act of the Commonwealth in regard to interstate trade. The Director of Marketing administers the Act, and the State Marketing Bureau, under his supervision, affords assistance to producers in regard to the marketing of their products, and collects and publishes information relating to market conditions. In 1936 and 1937 marketing boards were in operation for rice, eggs, wine grapes, and bananas.

#### *Supervision of Weights and Measures.*

The Weights and Measures Act is designed for the protection of the public from dishonesty in regard to the measurement of food in the course of distribution. It prescribes that traders' weighing and measuring appliances must be kept to a specified degree of accuracy.

The standard weights and measures of the United Kingdom have been adopted. It is a general rule that articles sold by weight must be sold by avoirdupois weight. The exceptions are as follows:—Precious metals, by troy weight; precious stones, by metric carat; drugs, retail, by apothecaries' weight. Sales by retail must be according to net weight or measure, and the practice of selling certain vegetables—e.g., green peas in the pod—and other commodities by measure of capacity has been prohibited by regulation. The net weight or measure must be stamped on packages in which commodities are offered for sale. Special provision has been made to prevent fraud in respect of the weighing of coal and firewood.

The weight of bread is regulated under the provisions of the Bread Act of 1901. The standard loaves weigh 1 lb., 2 lb., and 4 lb.

#### CONSUMPTION OF FOOD.

The comparative table published in earlier issues of the Year Book regarding the consumption of the more important articles of diet in various years since 1911 is not shown in this issue. Data for estimates of the per capita consumption of meat in particular, were found to be unsatisfactory and the table has been discontinued. The latest estimates of the per capita consumption of the various commodities, as far as they are available, are shown under various headings which follow.

#### *Meat.*

For the purpose of estimating the consumption of meat it is difficult to obtain details regarding the dressed weight of the animals slaughtered for local consumption. The most satisfactory of the available records indicates that the average annual consumption during the five years ended June, 1932, was 110 lb. of beef and veal and 73 lb. of mutton and lamb, and in more recent years about 100 lb. of beef and veal and 76 lb. of mutton and lamb. The annual consumption of pork is somewhat less than 5 lb. per head, and of bacon about 10 lb. per head.

The slaughter of stock and the sale of meat in the county of Cumberland, which contains the metropolitan area, are under the control of the Metropolitan Meat Industry Commissioner, appointed by the Governor.

In the Newcastle district, *i.e.*, within a radius of 14 miles from the Newcastle Post Office, slaughtering and inspection are controlled by the Newcastle District Abattoir Board. Outside the county of Cumberland and the Newcastle district, slaughtering is done at private abattoirs, which are subject to inspection by officers appointed by the local authorities and by the Board of Health.

The abattoir controlled by the Metropolitan Meat Industry Commissioner is situated at Homebush Bay in proximity to the stock saleyards. The carcase butchers purchase stock on the hoof, and delivered them at the abattoir on the day prior to slaughtering. They are treated by the staff of the abattoir and after chilling the carcasses are delivered to the owners early on the following morning.

The cost of slaughtering cattle, sheep and lambs at the abattoir at Homebush Bay and of delivering the meat to retail shops as estimated by the Metropolitan Meat Industry Commissioner is shown below; no amounts are included in respect of offal.

Particulars.	Per Carcase.	
	Cattle.	Sheep and Lambs.
Abattoir Costs, including slaughtering and dressing (delivered at Meat Hall, Homebush Bay)... ..	s. d. 10 0	s. d. 1 1
Delivery to Retail Shop ... ..	4 0	0 4
Total ... ..	14 0	1 5

For frozen meat there is, in addition to abattoir costs specified above, a charge for freezing, wrapping, storage up to twenty-eight days, and delivery to ship's side, *viz.*, beef  $\frac{7}{16}$  d. per lb.; mutton,  $\frac{1}{4}$  d. per lb. with a minimum of 1s. per carcase; lamb,  $\frac{5}{16}$  d. per lb., minimum 10d. per carcase. For storage over twenty-eight days the charge is at the rate of  $\frac{1}{24}$  d. per lb. per week.

The average retail prices of meat are shown on page 767, and further particulars relating to meat are published in the chapter of this volume entitled "Pastoral Industry."

### *Fish.*

The quantity of fresh fish marketed in New South Wales in 1936 represented about 11 lb. per head of population.

Owing to the climatic conditions it is difficult to distribute fresh fish to householders, and it is not probable that fish will become a popular food throughout the State until this difficulty has been overcome. Under existing conditions the bulk of the fresh fish is consumed in the metropolitan district. Somewhat more than half the supply is obtained in the river estuaries and coastal lakes and inlets, and the balance by deep-sea trawling. The quantity of trawled fish was 13,834,000 lb. in 1936.

Preserved fish is supplied almost entirely by importation. The average consumption is about  $3\frac{1}{4}$  lb. per head of population.

The Sydney Corporation Act, 1932, prescribes that in a defined area, which embraces the metropolitan and extra-metropolitan districts, fish may not be sold by auction except in public markets under the control of the council of a municipality or shire, and no person, except the original owner, may sell fish by wholesale unless it has been sold previously in a municipal market. The effect is to centralise the marketing of fish in Sydney in the Municipal Market, where the sales are conducted by licensed agents.

Regulations under the Fisheries Act require that all fish sold in the fish markets or by wholesale dealers must be sold by weight.

#### *Bread and Flour.*

Such food commodities as bread and potatoes were of greater importance in the usual family dietary in early years than at the present time, when a variety of vegetables and other foods are obtainable readily.

The average consumption of bread in New South Wales is estimated at about 100 loaves (2 lb.) per head.

The consumption of flour is estimated at approximately 200 lb. per head, including 199,000 tons, or 150 lb. per head, used for bread. In factories where biscuits are made for local consumption and for export, 12,580 tons of flour, or 9.5 lb. per head, were used during 1935-36, but the quantity used by pastrycooks is not available. Further particulars of the consumption of wheat and flour in New South Wales are shown in the chapter of this Year Book relating to Agriculture.

The hours of baking are those fixed by industrial awards or agreements as the hours of work for the employees concerned. The starting time is 5.30 a.m. on ordinary days and midnight when the day upon which the bread is to be delivered is a "double" or a "treble" delivery day, *i.e.*, a day preceding one or two holidays.

The majority of flour millers and bakers are organised in associations for the respective trades. The bread supply of the metropolitan area is baked in about 400 bakeries and is distributed by the bakers, part by retail delivery to the consumers' homes, and part by delivery to retail shops, where it is sold "over the counter" to consumers. Only a small quantity is sold to consumers at the bakeries.

#### *Prices of Flour and Bread.*

For many years it has been the practice of the associations of flour millers and bakers to declare from time to time prices of flour and of bread to be charged by members of the respective associations.

Approximately 1 ton (2,000 lb.) of flour is produced from 48 bushels of wheat and 1,230 (2 lb.) loaves of bread from 1 ton of flour. One penny per bushel variation in the price of wheat is equivalent to 4s. per ton variation in cost of flour, and prices of flour are varied at frequent intervals in relationship to variations in the price of wheat, though the prices of milling products (bran and pollard) are taken into account. Prices of bread are varied in relationship to the price of flour, but changes are not so frequent as alterations in the price of flour because a variation of  $\frac{1}{4}$ d. per loaf (2 lb.) of bread sets off a variation of £1 7s. 6d. per ton in price of flour. Other variations may result from changes in wage rates, hours of work, working conditions, taxation and costs of materials and equipment.

An additional factor in prices of flour and bread from 3rd March, 1931, to 31st May, 1934, and from 7th January, 1935, to 24th February, 1936, was a levy imposed on flour by either State or Federal Government, with the object of raising funds for the assistance of farmers.

When the flour tax was re-imposed by the Commonwealth Government in January, 1935, the rate being £2 12s. 6d. per ton, the Master Bakers' Association announced an increase of ½d. per loaf in price of bread over the counter. Thereupon a proclamation was issued by the State Government to prevent the increase, pending an investigation by a Royal Commission. After inquiry, the Commission recommended a scale of maximum bread prices varying automatically with the price of flour, and when the Master Bakers' Association agreed to adopt the recommendation the proclamation of 7th January was revoked as from 25th March, 1935. The maximum prices which became operative on that date are shown in the following statement with the "official prices" of bread in Sydney recommended to members by the Master Bakers' Association at each date of change since 1920 in comparison with the price of flour (including tax) on the date of change in prices of bread:—

Date of change in price of Bread.	Price per 2-lb. loaf.		Price of Flour per ton.	Date of change in price of Bread.	Price per 2-lb. loaf.		Price of Flour per ton.
	Cash over counter.	Cash delivered.*			Cash over counter.	Cash delivered.*	
1920.	d.	d.	£ s. d.	1929.	d.	d.	£ s. d.
1 Jan. ...	4½	4¾	12 15 0	4 Feb. ...	5½	5¾	11 0 0
1 Feb. ...	5½	5¾	16 7 6	1930.			
9 „ † ...	6	6½	19 2 6	30 June ...	5	5½	10 5 0
13 Dec. † ...	6¼	6½	19 7 6	1 Sept. ...	4¾	5¼	9 10 0
1921.				20 Oct. ...	4½	5	8 15 0
26 Sept. † ...	6½	6¾	20 17 6	1931.			
10 Dec. † ...	4¾	5	12 0 0	29 Mar. ...	5	5½	10 0 0½
1924.				1932.			
21 July ...	5	5½	14 10 0	1 Jan. ...	4½	5½	10 0 0½
20 Oct. ...	5¼	5½	15 5 0	1933.			
1925.				4 Dec. ...	5	6	11 15 0½
5 Jan. ...	5½	5¾	15 15 0	1934.			
1926.				1 June ...	4½	5¼	7 5 0.
10 May ...	5¾	6	15 0 0	13 Aug. ...	4½	5½	9 15 0
12 July ...	6¼	6½	15 15 0	1935.			
6 Dec. ...	6	6¼	13 10 0	25 Mar. ...	4¾-5§	5½	11 2 6½
1927.				21 Oct. ...	5-5½	5½-5¾	12 12 6½
31 Jan. ...	5¾	6	12 10 0	1936.			
19 Sept. ...	6	6½	13 15 0	25 Feb. ...	4½	5	9 10 0
1928.				17 Aug. ...	5	5½	12 0 0
13 Feb. ...	5¾	6	12 15 0	1937-			
				25 Jan. ...	5¼	5¾	12 15 0
				19 April ...	5½	6	13 7 6
				6 Sept. ...	5½	5¾	12 5 0

\* Cash daily or weekly. † Prices fixed by Profiteering Prevention Court. ‡ Including tax.  
§ 4½d. per loaf (2 or more loaves); 5d. per single loaf. The prices at this date were those recommended by Royal Commission.

In 1932-33 it was ascertained by inquiry that the "cash over counter" trade was 34 per cent. of all bread sold, and in January, 1935, it was 40 per cent.

Most of this trade is conducted by shopkeepers of various kinds who buy bread at wholesale rates from bakers. The price of bread delivered by bakers to shops in the period covered by the table was  $\frac{1}{2}$ d. per loaf less than the cash over counter price, except as from 25th March, 1935, when the wholesale price was 4s. 4 $\frac{1}{2}$ d. per dozen loaves. From 1920 to June, 1930, the cash over counter price was  $\frac{1}{2}$ d. per loaf less than the cash delivered price. Thereafter until the end of 1931 it was  $\frac{1}{2}$ d. less, and from January, 1932, to 25th March, 1935, it was 1d. less.

The increase in October, 1935, was due to increases in the price of wheat, the actual prices, which became effective from that date, being 5d. over the counter and 5 $\frac{1}{2}$ d. delivered. On abolition of the flour tax in February, 1936 the price of bread was reduced, but since August, 1936, it has become dearer in consequence of increases in the prices of wheat.

With the onset of general depression after 1930 competition intensified in the bread trade and the average prices actually realised by bakers for delivered bread fell far below the declared prices quoted above. Thus the actual price realised for delivered bread was ascertained to be 4.99d. per loaf in 1932-33, and 5.06d. per loaf in January, 1935, though the declared price in both periods was 5 $\frac{1}{2}$ d.

The report of the Royal Commission shows that in December, 1934, and January, 1935, the average prices realised by bakers per 2-lb. loaf for the various classes of sales were as follow:—

Wholesale to shops—40 per cent. of sales .. .. .	3.911
Delivered—ordinary—57 per cent. of sales .. .. .	5.062
food relief—3 per cent. of sales .. .. .	4.250
Average—all sales .. .. .	4.534

The average cost of production, distribution and administration, with flour at £9 17s. 6d. per ton, was 4.291d. per loaf, so that the margin for profit was 0.243d. per loaf.

### *Butter, Cheese, and Milk.*

Butter is an article of diet in general consumption throughout New South Wales, the local product being choice in quality and more than sufficient in quantity to supply the demand.

The manufacture of butter, etc., in factories is supervised by State inspectors in terms of the Dairy Industry Act, which is described in the chapter relating to dairying. Regulations under the Act prescribe that butter must contain not less than 80 per cent. of milk fat, not more than 16 per cent. of water, nor more than 3 per cent. of salt. It must not be mixed with foreign fat or oil, nor contain foreign substance except salt.

The butter industry is highly organised for production and distribution under arrangements which are described in the chapter of this Year Book entitled Dairying Industry. The effect of these arrangements has been to eliminate seasonal fluctuations in the prices of factory butter sold for local consumption, all but a very small proportion being of choicest grade. The wholesale price was constant at 140s. per cwt. from 1st May, 1934, to 29th June, 1937, when it was raised to 149s. 4d. The retail price was steady at 1s. 4 $\frac{1}{2}$ d. to 1s. 6d. per lb. in the various parts of the metropolitan district from May, 1934, until it was increased by 1d. per lb. in June, 1937.

An estimate of the quantity of butter (including butter made on farms) consumed in New South Wales in each year since 1929-30 is shown below.

Year ended June.	Consumption. (Factory and Farm butter.)		Year ended June.	Consumption. (Factory and Farm butter.)	
	Quantity.	Per head of Population.		Quantity.	Per head of Population.
	lb.	lb.		lb.	lb.
1930	84,725,000	33·6	1934	86,650,000	33·2
1931	82,915,000	32·6	1935	88,354,000	33·8
1932	83,100,000	32·4	1936	91,800,000	34·6
1933	84,119,000	32·5	1937 (a)	92,000,000	34·3

(a) Preliminary, subject to revision.

The consumption of cheese is small, the average being less than 4 lb. per head per annum.

Available records regarding the consumption of fresh milk in the metropolitan area indicate that the average in 1935-36 was about 22 gallons per head per annum, or less than half-a-pint per day.

The conditions under which milk and other dairy products are produced and distributed for human consumption are subject to regulation under the Dairies Supervision Act of 1901 and under the Pure Food Act of 1908, the Dairy Industry Act of 1915, and the Milk Act, 1931. All dairymen and milk vendors must be registered, and dairy premises are open to inspection at all times. The duties of registration and of inspection are vested generally in the local authorities, the Milk Board exercises control in the metropolitan and Newcastle districts, and the Pure Food Branch of the Department of Public Health exercises general supervision with a view to maintaining the standard of dairy products offered for sale.

The standard for milk is fixed by regulation under the Pure Food Act, which prescribes that it must be clean and fresh, and taken from a healthy cow, properly fed and kept. It must contain not less than 8.5 per cent. of milk solids not fat, and 3.2 per cent. of milk fat. In testing milk to determine the standard use is made of the freezing point test, and it is prescribed that freezing point must not lie between zero Centigrade and —0.55 degrees Centigrade, as determined in the Hortvet Cryoscope.

#### *Metropolitan and Newcastle Milk Supply.*

About a third of the milk supply of Sydney is derived from dairies within the metropolitan area and the balance from country districts, viz., the South Coast district between Wollongong and Nowra, the districts traversed by the Main Southern Railway between Liverpool and Moss Vale, the Penrith, Windsor, and Richmond Districts, the districts around Singleton, Branxton and Maitland on the Northern Railway line, and those in the neighbourhood of Dungog on the North Coast line.

The milk from the metropolitan dairies is distributed directly to the consumers within a few hours of milking. The milk from the country is handled for the most part by distributing companies. As a general rule, the milk is delivered by the producers at country factories, where it is received by the companies for transportation in bulk to the metropolis. The time occupied by the journey from the most distant stations is about ten hours, the average time between milking and arrival by rail in Sydney being sixteen and twenty-four hours.

The following statement shows the quantity of country milk brought into the metropolitan district during each year since 1927-28:—

Year.	Gallons.	Year.	Gallons.
1927-28	17,754,800	1932-33	18,245,300
1928-29	19,773,900	1933-34	18,038,000
1929-30	20,998,200	1934-35	18,639,500
1930-31	19,518,700	1935-36	20,065,400
1931-32	20,014,800	1936-37	21,249,500

The greater part of the milk consumed in and around Newcastle is supplied by dairies outside the district. The quantity of country milk distributed there was 1,183,100 gallons in 1933-34, and 1,192,000 gallons in 1934-35, 1,376,600 gallons in 1935-36, and 1,616,300 gallons in 1936-37.

The supply and distribution of country milk in both metropolitan and Newcastle districts are supervised by the Milk Board, which consists of three members appointed by the Governor, viz., a chairman, a representative of dairymen, and a representative of the milk consumers.

The metropolitan producing and distributing districts are defined by schedule of the Milk Act, and the Newcastle districts by proclamation. Other districts may be proclaimed subject to approval by Parliament. The metropolitan distributing district embraces the City of Sydney and fifty-three other municipalities, the Shires of Sutherland and Warringah, parts of Baulkham Hills and Hornsby Shires, and the Port of Sydney.

The Newcastle distributing district consists of Newcastle and suburbs and parts of the Shires of Lake Macquarie and Tarro.

The Milk Board commenced operations in the metropolitan district in December, 1931, upon the dissolution of the Metropolitan Milk Board (which is described in the Official Year Book, 1931-32, at page 721) and in Newcastle at the end of September, 1932.

The functions and powers of the Milk Board include the fixation of prices, and the regulation of methods and conditions of supply and treatment of milk in producing districts and of distribution in distributing districts. The milk supplied for consumption or use in distributing districts (except milk produced and retailed directly by a dairyman on his own behalf) is vested in the Board, and its supply, except to the Board, is prohibited. By arrangement, distributing companies organised for handling milk on a large scale act as agents for the Board in receiving the milk at country factories and transporting it to Sydney or Newcastle, where they purchase their supplies from the Board.

The Board determines the quantity of milk to be supplied by the various producing areas and pays the producers at the minimum prices fixed under the Act. The Board is authorised to raise loans, with the Governor's approval, up to a limit of £500,000, and to acquire the business of persons engaged in the milk trade, paying the current market value for land and replacement value, plus 10 per cent. for plant, etc.

In March, 1932, the Milk Board fixed minimum prices to be paid to dairymen for milk for the metropolitan district, delivered at certain factories, on a basis by which the cost, including treatment, handling at

country factory and freight, would be about 13d. per gallon on rail Sydney. Prices for the Newcastle district were fixed as from 6th January, 1933. The prices fixed for each district were as follows:—

Particulars.	Metropolitan, March, 1932.	Newcastle, January, 1933.
Prices to dairymen—Minimum, per gal.—		
Delivered at country factories ... ..	10d. to 11½d.	11d. to 11½d.
„ Sydney „ ... ..	12¼d.	...
„ elsewhere „ ... ..	12¾d.	...
Wholesale price to Vendors—Maximum, per gal.	1s. 5d.	1s. 4d.
Retail prices—Maximum, per gallon ... ..	2s. 4d. to 2s. 8d.*	2s. 2d.
„ „ per quart ... ..	7d. to 8d.*	6½d.

\* The higher price is for milk produced locally and retailed by producer.

### *Sugar and Jam.*

The quantity of sugar consumed, including the quantities used in the local manufacture of products such as jam and biscuits (of which a proportion is exported), is about 100 lb. per head. This estimate does not include the sugar contents of imported jam, preserved fruit, etc. The records of the factories of New South Wales in 1935-36 show that 5,835 tons of sugar (4.9 lb. per head) were used for jam and canned fruit; 2,830 tons (2.4 lb. per head) for biscuits; 4,557 tons (3.8 lb. per head) in breweries; 2,942 tons (2.5 lb. per head) in aerated water factories; 9,572 tons (8.1 lb. per head) in making confectionery; 3,460 tons (2.9 per head) by pastry-cooks; 2,763 tons (2.3 per head) in making condiments, pickles and sauces; and 1,133 tons (1 lb. per head) in making condensed milk and ice cream.

Sugar is produced in New South Wales and Queensland in sufficient quantity to supply Australian requirements. The output of raw sugar in both States is acquired by the Queensland Sugar Board in terms of an agreement between the Governments of the Commonwealth and Queensland. The Board makes arrangements for the refining and distribution of sugar for local use at prices fixed by agreement, and for the exportation of the surplus. The importation of foreign sugar into Australia is not permitted. The retail price of sugar in the metropolitan shops is 4d. per lb.

Jams and preserved fruit are manufactured in Australia in larger quantities than the local demand can absorb.

### *Tea and Coffee.*

Tea enters largely into consumption among all classes, the average annual consumption being nearly 7 lb. per head. Of coffee on the other hand, the average is about half a pound per head.

The tea consumed in New South Wales is imported mainly from Netherlands East Indies and Ceylon. During the three years ended June, 1937, the Netherlands East Indies supplied 61 per cent. of the total importations; 30 per cent. was imported from Ceylon, 4 per cent. from India, 3 per cent. from China, and 2 per cent. from Japan.

The coffee is imported for the most part from the Netherlands East Indies or India.

### *Vegetables and Fruit.*

The potato is the chief article of diet in the vegetable group, but it is subject to great fluctuations in supplies and in prices, and the consumption varies accordingly. Local production is inadequate, and large quantities are imported from Tasmania and Victoria.

Onions are imported in large quantities from Victoria. Other vegetables are obtained chiefly from local sources, the Sydney supplies being marketed at the City Council's market, where the growers sell their produce by private treaty.

The fruit supply is derived mainly from the local orchards, and from Victoria, Tasmania, and Queensland. Prior to the war, bananas were imported in large quantities from Fiji, but the Tweed River district of New South Wales and the State of Queensland are now the chief sources of supply.

#### GAS AND ELECTRICITY FOR DOMESTIC CONSUMPTION.

An index of the quantity of gas and electricity consumed in the metropolitan area (excluding electricity used for railways and tramways), with the average annual consumption during the three years 1929 to 1931 as base equal to 1000, is shown below:—

Year.	Index Number.	Year.	Index Number.
1929	1,054	1933	984
1930	991	1934	1,018
1931	955	1935	1,080
1932	963	1936	1,121

The supply of gas and electricity for cooking, heating and lighting is subject to regulation in terms of the Gas and Electricity Act, 1935. Standards are prescribed in respect of power, purity and pressure of gas, also standard prices for gas supplied to private consumers by meter. Standard rates are fixed for dividends payable by the gas companies, viz., 6 per cent. on ordinary share capital, and 5½ per cent. on preference shares. The standard prices may be varied after inquiry as to what price would enable the company concerned to pay the standard rates of dividend. Such inquiries are conducted by boards which may be appointed from time to time, each consisting of a member nominated by the Minister for Local Government, one nominated by the company concerned, and a chairman chosen by agreement between the Minister and the company.

In regard to electricity the Gas and Electricity Act, 1935, authorises the Governor to proclaim regulations in respect of the use of electrical apparatus and the supply of electricity. It constituted an advisory committee to advise the Government in matters relating to the supply and use of electricity, and its development throughout the State.

Further particulars relating to gas and electricity works are shown in the chapters "Local Government" and "Factories."

The rates for gas for domestic consumption, as charged since 1911 by the Australian Gaslight Company, which supplies the greater part of the metropolitan area, are shown below:—

Date of Change in Price.	Rate per 1000 cubic feet.	Date of Change in Price.	Rate per 1000 cubic ft.	Date of Change in Price.	Rate per 1000 cubic feet.
	s. d.		s. d.		s. d.
January, 1911 ..	3 9	November, 1920 ...	5 1	July, 1926 .....	5 8
" , 1913 ...	3 6	May, 1922 .....	5 9	August, 1927 ...	5 9
August, 1914 ...	3 10	August, 1922 ...	5 8	November, 1931 ...	5 6
March, 1917 ...	4 1½	January, 1923 ...	5 6	September, 1932 ...	5 3
August, 1918 ...	4 5	February, 1925 ...	5 4	November, 1933 ...	5 2
February, 1919 ...	4 4	November, 1925 ...	5 2	March, 1937 ...	5 4
January, 1920 ...	4 8	January, 1926 ...	5 7	September, 1937 ...	5 9

The rate 5s. 9d. per 1,000 cubic feet, equivalent to .428d. per gas unit (3,412 British thermal units gross) was current in November, 1937.

The charges for electricity supplied by the City of Sydney electricity undertaking to private dwellings in the metropolitan area in January, 1911, with subsequent changes, are shown below. Up to May, 1925, there were separate rates for lighting and for power. Lighting was charged at a flat rate per unit, or, at the customer's option, at the "maximum demand" rate, which is  $\frac{1}{2}$ d. per unit dearer than the flat rate, for the first hour's use per day, and at a lower rate per unit thereafter.

In May, 1925, a "single meter" system of charges was introduced, by which a certain rate is charged for primary units (either lighting or power) up to  $2\frac{1}{2}$  units per quarter per 100 square feet enclosed by the outer walls of the residence; and a much lower rate for secondary units in excess of this limit. The rate for secondary units is lower still where an electric range has been installed for cooking. Consumers at the date when the single meter rate was introduced were allowed the option of having their accounts charged as formerly at separate rates for power and lighting or of changing to the new system.

Date.	Power— Flat Rate, per unit.	Lighting.			Date.	Single Meter—Power and Lighting.		
		Flat Rate, per unit.	Maximum Demand Rate.			Primary Units.	Secondary Units, per unit.	
			Per Primary unit.	Per Second- ary unit.			Per unit.	Ordinary Rate.
1911	d. 1·5	d. 4·5	d. 5	d. 2	1925, May	d. 5	d. 1·25	d. ...
1921, July	2	5	5·5	2·5	1933, July	5	1·25	1
1923, April*	1·7	4·75	5·25	2·25	1934, May	5	1·1	1
					1935, Sept.*	5	1	0·7

\* Current January, 1938.

#### WHOLESALE PRICES.

Information relating to wholesale prices in Sydney is published in detail in the "New South Wales Statistical Register." The average prices of the various commodities in each year from 1901 to 1920 are published in the issue for 1919-20, and those for the decennial period 1921 to 1930 in the issue for 1929-30. The monthly averages from January, 1919, are shown in the annual issues from 1919-20.

Index numbers of the wholesale prices in Sydney have been compiled from the prices of 100 commodities, which include the majority of items of importance in the economic life of the State. The commodities have been arranged in eight groups, and each commodity has been weighted according to the average annual consumption in New South Wales during the three years 1911-1913. The index numbers indicate only the general trend of the movement in wholesale prices, and it is not claimed that they give an exact measure of the variations which have occurred. Those for recent years especially should be used with caution in view of the fact that the list of commodities and the weights applied to the various items are based on the customs and usages of a period which ended more than twenty years ago. Steps are being taken for the revision of the index numbers.

Details relating to the composition of the index numbers of wholesale prices are stated in the 1919 and 1920 issues of the Year Book, *e.g.*, the grade of the articles or commodities included, the source of information as to prices, and the weights applied. An important amendment was introduced in January, 1930, when local prices of wool and cotton were substituted for the English prices used up to that month.

The index numbers of each group and of all groups combined in various years since 1901 are shown below, and the numbers for each year from 1901 to 1921 are published in the 1921 issue of the Year Book. The prices in the year 1911 have been used as a base, and called 1,000. The indexes are not comparable between groups, except to illustrate the relative change in one group with the corresponding ratio in another.

Year.	I. Agricultural Produce.	II. Groceries	III. Wool, Cotton, Leather, Jute.	IV. Metals and Coal.	V. Building Materials	VI. Meat.	VII. Dairy Produce	VIII. Chemicals.	All Commodities.
1901	834	949	737	1001	745	1222	963	977	904
1906	929	960	937	996	806	1163	953	951	935
1911	1000	1000	1000	1000	1000	1000	1000	1000	1000
1913	1069	1033	1043	1039	1107	1379	1093	1003	1092
1916	1163	1245	1367	1725	1241	2896	1380	1617	1489
1920	2430	1914	3079	2602	2415	3113	2236	2301	2503
1921	1750	1941	1471	2511	2259	1921	2020	1863	1956
1926	1892	1683	1652	2161	1893	1802	1760	1447	1834
1929	1707	1661	1656	2164	1953	2391	1842	1457	1862
1930	1428	1664	1384	2046	1941	2230	1571	1472	1705
1931	1061	1758	1326	2038	1959	1538	1386	1633	1551
1932	1137	1752	1235	2034	1943	1371	1295	1636	1525
1933	1122	1659	1339	1995	1854	1518	1172	1585	1507
1934	1144	1678	1393	1933	1712	1599	1245	1458	1504
1935	1279	1677	1328	1920	1663	1609	1292	1374	1527
1936	1299	1670	1470	1901	1707	1679	1316	1346	1562

\* Weighted average.

The general index number of wholesale prices fell by 17 per cent. between 1929 and 1931, and by about 3 per cent. during the next three years. Since 1934 it has risen by 4 per cent. The decline affected nearly all the groups of commodities, being greatest in respect of meat, agricultural and dairy produce.

In comparison with 1929, the index numbers in 1936 were lower by 11 per cent. in the textile group, 12 per cent. in minerals and building materials, 24 per cent. in agricultural produce, nearly 30 per cent. in meat and dairy produce and 8 per cent. in chemicals. Groceries were somewhat dearer than in 1929.

The movement in wholesale prices, month by month, since July, 1935, may be gauged from the following table, the base being the year 1911 as in the preceding table. Particulars for the last three months of the year

1929 are shown also, to indicate the level from which prices have fallen in recent years:—

Month.	I. Agricultural Produce.	II. Groceries	III. Wool, Cotton, Leather, Jute.	IV. Metals and Coal.	V. Building Materials	VI. Meat.	VII. Dairy Produce.	VIII. Chemicals.	All Commodities.
1929.									
October ...	1968	1674	1590	2149	1972	2677	1795	1456	1926
November ...	1870	1670	1533	2149	1972	2573	1731	1441	1890
December ...	1675	1673	1492	2149	1997	2671	1723	1441	1852
1935.									
July...	1303	1679	1359	1913	1669	1817	1297	1353	1558
August ...	1370	1680	1347	1901	1660	1953	1273	1353	1581
September ...	1385	1680	1384	1916	1658	1983	1265	1353	1591
October ...	1388	1680	1399	1924	1660	1897	1279	1353	1588
November ...	1301	1676	1434	1924	1659	1781	1288	1353	1563
December ...	1352	1676	1428	1924	1658	1646	1298	1353	1561
1936.									
January ...	1337	1674	1467	1924	1658	1941	1268	1351	1589
February ...	1253	1679	1486	1916	1661	1810	1330	1351	1567
March ...	1170	1675	1495	1914	1661	1695	1349	1348	1540
April ...	1181	1672	1496	1914	1660	1469	1363	1348	1521
May ...	1231	1673	1490	1913	1659	1371	1360	1348	1521
June ...	1242	1673	1423	1913	1709	1678	1321	1348	1546
July ...	1261	1673	1431	1886	1703	1811	1312	1348	1559
August ...	1288	1673	1440	1886	1704	1857	1280	1348	1568
September ...	1292	1670	1392	1883	1711	1803	1285	1343	1566
October ...	1331	1659	1431	1881	1769	1675	1296	1340	1564
November ...	1455	1659	1534	1898	1791	1464	1309	1340	1590
December ...	1561	1659	1554	1898	1794	1579	1318	1340	1630
1937.									
January ...	1499	1671	1655	1909	1812	1725	1322	1341	1652
February ...	1435	1671	1618	1938	1824	1603	1404	1341	1634
March ...	1422	1671	1677	1986	1844	1614	1439	1341	1653
April ...	1487	1667	1724	2009	1842	1545	1416	1341	1668
May ...	1500	1667	1731	2001	1924	1471	1400	1341	1671
June ...	1530	1668	1677	1988	1920	1616	1402	1350	1682
July ...	1545	1671	1665	1988	1920	1684	1447	1354	1695
August ...	1588	1673	1675	1998	1933	1835	1397	1378	1719

At the beginning of the year 1936 wool prices were rising steadily but this was offset by a decline in agricultural produce and meat, so that the general index number declined by  $4\frac{1}{2}$  per cent. between January and May. Then wheat became dearer, also building materials; a decline in prices of dairy produce was arrested, and the index number for December, 1936, rose to a level 5 per cent. higher than in December, 1935.

It is interesting to trace the changes in the wholesale prices of the principal products of the rural industries in recent years, as well as in those of the non-rural items included in the index:—

Year.	Wheat.	Wool.	Butter (Local Sales).	Non-rural Commodities.	All Commodities.
1911 ...	1000	1000	1000	1000	1000
1926 ...	1762	1976	1868	1823	1834
1927 ...	1545	2106	2061	1851	1840
1928 ...	1460	2176	1868	1866	1785
1929 ...	1395	1624	2041	1836	1863
1930 ...	1100	1094	1725	1778	1705
1931 ...	695	1047	1543	1804	1551
1932 ...	876	965	1400	1774	1525
1933 ...	821	1271	1236	1716	1507
1934 ...	769	1471	1330	1666	1504
1935 ...	917	1282	1415	1651	1527
1936 ...	1198	1682	1415	1650	1562

The price of wool to which the index numbers relate is the average at auction sales in Sydney where the great bulk of the wool is sold for export oversea. Therefore the price depends upon conditions of world markets except in so far as it is affected by premium on exchange. Oversea conditions influence the price of wheat also. Subsidies paid to the wheat farmers by the Government in the four seasons 1931-32 to 1934-35 are not included in the price of wheat on which the index is based. The index number for wool in 1936 was substantially higher than in 1932 and the index for wheat was trending upwards. Prices of both these commodities rose further during 1937.

The index numbers for butter refer to the supply for local consumption, which is dearer than butter for export. The index number for non-rural commodities has fallen slowly; in 1935 and 1936 it was 10 per cent. below the level of 1926. This index number is based on the prices of the 74 non-rural commodities included in the general index number, no highly manufactured commodities being taken into consideration.

The average wholesale prices of thirty commodities, which are representative of the various groups covered by the index numbers, are shown in the following statement. The quotations represent the mean of the monthly prices in Sydney and are stated in Australian currency.

Commodity.	1911.	1921.	1929.	1931.	1932.	1935.	1936.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Wheat, milling .. .. bush.	3 6	3 7.9	4 10.6	2 5.2	3 0.9	3 2.5	4 2.3
Flour .. .. ton	169 9	386 7	239 11	191 3	197 0	219 10	217 10
Chaff, wheat .. .. "	81 0	128 9	137 2	78 2	78 9	91 1	94 4
Hay, oaten .. .. "	94 5	151 11	150 4	118 11	124 6	155 2	147 2
Potatoes .. .. "	111 5	119 0	133 6	130 8	120 0	184 1	144 8
Sugar .. .. "	437 6	980 0	746 8	746 8	746 8	664 0	664 0
Tobacco, dark plug .. lb.	5 0	8 2	8 4	10 9	11 0	11 5	11 5
Tea .. .. "	1 1.5	2 1	2 2	2 4	2 1	2 3.3	2 1.9
Soap .. .. 40 lb.	18 4	28 9	24 0	22 11	22 0	21 0	20 11
Jam .. .. 18 "	6 2	13 0	11 6	10 9	11 7	9 8	9 8
Kerosene .. .. 8½ gal.	7 3	20 8	13 4	13 0	13 2	12 2	12 11
Wool, greasy .. .. lb.	0 8.5†	1 0.5†	1 1.8	0 8.9	6 8.2	0 10.9	1 2.3
Leather, sole .. .. "	1 1.7	1 11	1 9	1 7	1 8	1 8.2	1 7.5
Woolpacks .. .. each	2 4	3 9	3 10	4 2	3 8	3 5	2 10
Iron—Pig, local .. .. ton	78 4	182 6	120 0	115 0	96 8	81 4	80 0
Plate, girder .. .. "	233 4	606 8	390 0	410 2	434 7	430 6	419 8
Corrugated, galv. .. "	346 8	979 2	517 6	609 7	571 7	516 0	510 0
Copper, sheet .. .. lb.	0 10.5	2 2	1 9	1 9.5	1 10.3	1 10.1	1 10
Hardwood, local (3 x 2) 100 lin. ft.	8 6	18 0	16 4	16 0	15 1	12 6	12 6
Pine—Local (4½ x 1) 100 sup. ft.	25 5	62 0	61 0	61 8	58 4	54 0	54 6
N.Z. (4½ x 1) .. .. "	22 2	62 0	41 0	42 8	43 6	36 0	37 8
Oregon (2 x 2) .. .. "	15 7	47 1	29 4	36 0	37 8	26 0	30 9
Bricks .. .. 1,000	42 0	68 0	71 7	57 0	57 0	50 0	62 6
Beef—Fore .. .. lb.	0 1.7	0 2.2	0 4.3	0 2.4	0 2.4	0 2.5	0 2.4
Hinds .. .. "	0 2.7	0 5.6	0 6.9	0 5.0	0 4.3	0 4.3	0 4.2
Mutton .. .. "	0 2	0 4.2	0 4.4	0 2.6	0 2.3	0 3.5	0 4
Lamb .. .. "	0 2.7	0 6.8	0 6.4	0 4.6	0 3.9	0 5.5	0 6.5
Butter .. .. "	10.6	1 10	1 10	1 4	1 3	1 3	1 3
Eggs, new laid .. .. doz.	1 4	2 4	1 10	1 4	1 3	1 3	1 2.9
Cream of tartar .. .. lb.	0 11.2	2 0	1 4	2 0	1 10	1 7	1 7

† Weighted average (season ended June).

In comparison with the previous year, the prices of wheat, chaff, kerosene, wool, timber, bricks, mutton and lamb were dearer in 1936; flour was cheaper as a result of the abolition of the tax of £2 12s. 6d. per ton in February, 1936; hay, potatoes, wool packs and pig-iron also were cheaper.

*Comparison with Other Countries.*

The following statement shows the wholesale price index numbers for various parts of the British Empire and for the United States of America, with 1929 as base:—

Year.	New South Wales. (Sydney). [Bureau of Statistics.]	Victoria, (Melbourne). [Common- wealth Bureau of Census and Statistics.]	New Zealand. (Census and Statistics Office.)	Canada. [Dominion Bureau of Statistics.]	United Kingdom. [Board of Trade.]	United States of America. [Bureau of Labour.]
Number of Commodities.	100	92	180	238	150	550
1929	100	100	100	100	100	100
1930	92	89	97	91	88	91
1931	83	79	91	75	77	77
1932	82	78	87	70	75	68
1933	81	78	88	70	75	69
1934	81	82	89	75	77	79
1935	82	82	93	75	78	84
1936	84	86	95	78	83	85

The index numbers show the trend of wholesale prices in each of the countries specified but they are not comparable one country with another.

## RETAIL PRICES.

The average retail prices in Sydney of various commodities, as shown in this chapter, are based on the prices quoted by retail shops in the metropolitan district in returns collected by the Commonwealth Statistician.

The following statement shows annual averages of the principal food commodities. The figures represent the mean of the monthly prices during each year.

Commodity.	1901.	1911.	1921.	1929.	1931.	1932.	1935.	1936.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Bread .. .. 2lb. loaf	0 2 5	0 3 5	0 6 2	0 5 7	0 5 4	0 5 3	0 5 2	0 5 2
Flour .. .. 25lb.	1 11 0	2 9 0	6 1 6	4 5 0	3 7 7	3 9 2	3 9 3	3 10 2
Tea .. .. lb.	1 3 0	1 3 5	1 10 7	2 2 1	2 3 7	2 2 4	2 2 7	2 2 7
Sugar .. .. "	0 2 3	0 2 7	0 5 7	0 4 6	0 4 6	0 4 5	0 4 0	0 4 0
Rice .. .. "	0 2 5	0 2 7	0 4 9	0 3 7	0 3 5	0 3 5	0 3 1	0 3 0
Oatmeal .. .. 5 lb.	0 11 3	1 0 5	1 5 0	1 8 6	1 3 6	1 3 5	1 0 9	1 0 5
Soap .. .. lb.	0 2 5	0 3 0	0 5 0	0 5 2	0 5 3	0 5 0	0 4 3	0 4 6
Potatoes .. .. 14 lb.	0 11 3	1 0 2	1 4 5	3 6 2	1 6 7	1 6 8	2 0 3	1 8 9
Kerosene .. .. gal	0 10 1	0 11 1	2 10 9	1 11 3	1 9 4	1 9 3	1 0 5	1 6 1
Milk .. .. quart	0 4 0	0 4 4	0 8 1	0 9 0	0 7 1	0 7 2	0 7 2	0 7 2
Butter .. .. lb.	1 0 2	1 1 7	2 0 7	2 0 7	1 7 0	1 5 4	1 5 6	1 4 8
Cheese .. .. "	0 7 5	0 8 7	1 3 0	1 4 2	0 11 9	0 10 2	0 11 7	1 0 5
Eggs, Fresh .. .. doz.	1 3 0	1 3 5	2 6 5	2 1 1	1 7 3	1 5 8	1 5 0	1 6 9
Bacon, Middle Cut .. .. lb.	0 9 0	0 10 5	1 10 9	1 7 7	1 2 2	1 1 4*	1 1 3*	1 1 3*
Beef, Sirloin .. .. "	0 4 5	0 4 5	0 9 1	0 11 3	0 9 3	0 8 7	0 9 2	0 9 5
Beef, Rib .. .. "	0 3 8	0 3 8	0 6 7	0 8 6	0 7 2	0 6 5	0 6 6	0 7 2
Steak Rump .. .. "	0 7 0	0 7 0	1 2 0	1 4 0	1 1 9	1 1 0	1 1 0	1 1 4
Beef, Corned Round .. .. "	0 4 0	0 4 0	0 8 1	0 8 6	0 7 8	0 7 3	0 7 1	0 7 4
Mutton, Leg .. .. "	0 3 2	0 3 0	0 6 9	0 8 4	0 6 2	0 5 7	0 6 7	0 7 2
Mutton, Loin .. .. "	0 3 3	0 3 8	0 7 6	0 9 8	0 7 6	0 6 6	0 7 6	0 8 1
Chops, Loin .. .. "	0 4 2	0 4 0	0 8 6	0 11 0	0 7 0	0 7 1	0 8 2	0 8 8
Chops, Leg .. .. "	0 3 8	0 3 8	0 8 1	0 9 8	0 7 4	0 6 6	0 7 5	0 8 0
Pork, Leg .. .. "	0 6 2	0 7 8	1 3 4	1 2 6	0 11 1	0 10 7	0 10 8	0 10 8
Pork, Chops .. .. "	0 6 8	0 8 5	1 5 8	1 3 2	0 11 2	0 10 6	0 10 7	0 10 8

\* Rashers.

In 1936, the average prices of meat, eggs, and cheese were dearer than in the previous year; potatoes were cheaper.

## HOUSE RENTS.

When the census was taken in June, 1933, the private dwellings occupied by tenants in New South Wales numbered 270,740, and the average weekly rental (unfurnished) was 18s. 10d. *viz.*, private houses 18s. 1d. and flats and tenements 23s. 9d. The number in the metropolitan area was 160,260, and the average rentals 21s. 11d.—private houses 21s. 1d., flats and tenements 25s. 4d. Further details regarding rents in the metropolitan and country districts at the Census date were published in the 1933-34 issue of this Year Book.

A comparative statement of average rents in Sydney is shown below. The averages have been computed from returns supplied by house agents in relation to brick and wooden houses of an average standard—those with special advantages or disadvantages being excluded.

Year.	Under Four Rooms.	Four Rooms.	Five Rooms.	Six Rooms.	Seven Rooms.	Over Seven Rooms.	Weighted Average.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1901 ... ..	9 0	11 1	13 7	15 4	19 1	22 2	13 5
1906 ... ..	9 2	11 7	14 0	16 9	19 1	22 6	13 11
1911 ... ..	11 4	14 5	17 1	20 2	23 3	26 10	17 0
1916 ... ..	12 3	14 8	17 11	20 6	24 6	29 8	18 11
1921 ... ..	14 2	18 5	21 7	25 2	29 7	35 9	23 0
1926 ... ..	15 4	21 0	25 6	33 6	36 9	47 6	28 4
1929 ... ..	15 10	21 4	26 11	32 8	37 0	52 10	29 3
1930 ... ..	15 10	21 11	28 0	31 7	36 9	46 6	28 9
1931 ... ..	15 3	19 5	23 6	27 10	33 7	43 8	25 7
1932 ... ..	13 7	17 1	20 2	25 8	30 11	42 10	23 3
1933 ... ..	13 3	16 7	19 8	25 1	30 11	42 10	22 10
1934 ... ..	13 4	16 7	20 3	24 6	30 7	42 3	22 9
1935 ... ..	13 4	16 8	20 6	25 0	30 6	42 10	23 0
1936 ... ..	13 10	17 3	21 4	25 5	30 10	44 9	23 8

Note.—Kitchen is included as a room.

The general level of rents in Sydney did not vary greatly from 1926 until the latter part of the year 1930. The weighted average in the two quarters January to June of that year was about 29s. 6d. Then it commenced to fall and in June quarter, 1931, it was 26s. 1d. or 3s. 5d. lower. A further

decline below 23s. during 1932 was due to some extent to the operation of legislation for the reduction of rents. Subsequently there was little change until the latter part of the year 1935, when the average commenced to rise slowly.

*Legislation for Reduction of Rents, etc.*

As part of a plan for the restoration of prosperity in Australia, the Reduction of Rents Act was passed in New South Wales in October, 1931, to prescribe a general reduction of  $22\frac{1}{2}$  per cent. in rents (except those payable to the Crown) except where the lessor obtained an order of a court of petty sessions permitting rent to be charged at a higher rate. The law did not apply to premises which were not leased on 30th June, 1930, unless a lease had been entered into three months before the Act commenced. The Act expired by effluxion of time on 31st December, 1932, and the general reduction of  $22\frac{1}{2}$  per cent. in respect of leases existing at at 30th June, 1930, has been continued until 31st December, 1938, in terms of the Landlord and Tenant (Amendment) Act. Provision was made, however, that, upon application within a certain period, a competent court might increase the rent in certain cases up to the amount stated in the lease (as maximum) or might order a further reduction.

In addition to measures for the regulation of rents, amendments have been made in the tenancy laws for the purpose of mitigating hardship in cases where tenants are unable to pay rent on account of unemployment. Thus distraint for rent, as provided by the Landlords and Tenants Act, 1899, was abolished as from 10th December, 1930, and in August, 1931, the right to eject tenants from dwellings leased at rents not exceeding £3 a week became subject to orders of a competent court. The court may postpone eviction if the occupiers are in impoverished circumstances owing to inability to obtain employment, and postponement may be made subject to a condition that the occupier pay to the owner such sum in such instalments and at such times as the court orders. An order for postponement may not be granted if it would cause the owner to suffer undue hardship, nor if the occupier or other person residing in the dwelling has been guilty of acts of waste depreciating its value. By the Landlord and Tenant (Amendment) Act, 1932, the period of postponement has been limited to four months.

RETAIL PRICE INDEX NUMBERS.

The retail price index numbers for Sydney and other Australian cities and towns are compiled by the Commonwealth Statistician. The earliest index numbers relate to the prices of food and groceries and rents of all houses, with the year 1911 as the base. Particulars of this index have been published in earlier issues of the Year Book. It is known as the "All Houses" or "A" series index, and has been practically superseded by the "All Items" or "C" series index. The latter series originated in the findings of the Royal Commission appointed by the Federal Government in 1919 to inquire into the basic wage. The Commission conducted an

investigation into the cost of living for a family consisting of man, wife and three children under 14 years of age, and having determined a standard of living, ascertained the cost in the capital cities of Australia in November of each year from 1914 to 1920. After the inquiry, the Commonwealth Statistician extended the scope of his investigations regarding retail prices to cover all the main groups of household expenditure on the basis of a regimen similar to that adopted by the Commission in order to compile the "All Items" index numbers. The groups of household expenditure covered by the series are food and groceries, rent of four- and five-roomed houses, clothing, and miscellaneous items, including fuel and light.

The "All Items" retail price index numbers for Sydney as compiled by the Commonwealth Statistician are shown below. The index numbers from 1914 to 1922 inclusive relate to the month of November, and annual figures are shown for later years. Separate particulars are stated for the various groups of expenditure. The base of each group of household expenditure is the weighted average for that group in the six capital cities of Australia during the quinquennium 1923-1927, taken as 1,000.

Period.	Retail Price Index Numbers—"All Items."					
	Food and Groceries.	Housing (4 and 5 Rooms).	Food, Groceries and Housing Combined.	Clothing.	Miscellaneous.	Total, Household Expenditure.
1914, November...	638	758	680	755	766	712
1915 " ...	844	780	825	805	798	816
1916 " ...	833	791	818	903	808	836
1917 " ...	877	797	848	1009	889	892
1918 " ...	877	832	861	1102	988	938
1919 " ...	1073	866	1000	1237	1059	1065
1920 " ...	1225	980	1138	1323	1209	1193
1921 " ...	964	1000	977	1255	1009	1046
1922 " ...	982	1048	1006	1051	1034	1021
1923-27 ... ..	1012	1111	1047	950	1021	1020
1928 ... ..	1021	1143	1064	978	1048	1042
1929 ... ..	1090	1162	1115	983	1046	1073
1930 ... ..	984	1197	1059	931	1040	1026
1931 ... ..	876	1026	929	835	1013	922
1932 ... ..	852	894	867	769	996	867
1933 ... ..	800	864	822	742	988	832
1934 ... ..	825	869	840	746	975	842
1935 ... ..	840	891	858	746	976	852
1936 ... ..	848	930	878	778	949	866
1937—						
1st quarter ...	872	949	900	808	933	884
2nd quarter ...	857	960	894	817	937	884
3rd quarter ...	865	973	903	820	939	890

The index number of total household expenditure in Sydney fell by 22½ per cent. between 1929 and 1933. Then it began to rise slowly. In the third quarter of the year 1937 it was 17 per cent. lower than in 1929.

*Retail Prices of Food—Comparison with other Countries.*

The following statement shows the increases since July, 1914, in the retail prices of the principal articles of food in other countries. The figures for the oversea countries have been taken from the "London Labour Gazette" and other official sources; those relating to Sweden include fuel and lighting. The particulars for the Australian States relate to the capital cities.

Country.	Percentage Increases in Retail Food Prices since July, 1914.					
	July, 1932.	July, 1933.	July, 1934.	July, 1935.	July, 1936.	July, 1937.
New South Wales ... ..	32	25	26	30	29	34
Victoria ... ..	23	15	20	28	31	36
Queensland ... ..	24	18	23	28	31	38
South Australia ... ..	10	4	7	13	16	18
Western Australia .. ...	7	1	7	10	18	19
Tasmania ... ..	16	12	16	17	20	27
Australia ... ..	23	16	20	26	27	32
New Zealand ... ..	8	4	11	18	25	36
South Africa ... ..	6*	2*	3	2	1	2
United States ... ..	8	13	17	27	33	36
Canada .. ...	8*	5*	1	3	9	17
United Kingdom ... ..	25	18	22	26	29	40
Germany ... ..	16	14	20	23	24	25
Sweden ... ..	28	23	25	32	35	41
Norway ... ..	34	32	33	40	45	61
France (Paris) ... ..	449	408	391	325	362	500

\*Percentage decrease.

The index numbers shown above may not be used for exact comparisons between the various countries owing to differences in the scope of the data, and in methods of compilation.

## EMPLOYMENT AND PRODUCTION

## EMPLOYMENT.

*Census Records.*

At the Census taken in June, 1933, the bread-winners (including those unemployed, pensioners, and persons of independent means) numbered 1,209,805, and dependants numbered 1,391,042, being respectively 46.5 per cent. and 53.5 per cent. of the total population of New South Wales. The male bread-winners, 912,591, represented 69 per cent. of the male population, and the female bread-winners, 297,214, were 23 per cent. of the females.

A classification of the bread-winners, according to industry, is shown below:—

Industry.	Number.			Proportion of Total (approximate).		
	Males.	Females.	Total.	Males.	Females.	Total.
Agricultural, Pastoral and Dairying—				per cent.	per cent.	per cent.
Farming (including mixed and undefined) ... ..	81,999	1,740	83,739	6.2	.1	3.2
Grazing ... ..	43,049	1,153	44,202	3.3	.1	1.7
Dairy-farming ... ..	34,329	2,296	36,625	2.6	.2	1.4
Pig and poultry farming ...	3,867	365	4,232	.3	.0	.2
Other ... ..	8,517	147	8,664	.6	.0	.3
Total, Agricultural, Pastoral, etc. ...	171,761	5,701	177,462	13.0	.4	6.8
Forestry, Fishing and Trapping	12,597	56	12,653	.9	.0	.5
Mining and Quarrying ... ..	34,029	69	34,098	2.6	.0	1.3
Industrial—						
Manufacture ... ..	152,793	48,756	201,549	11.6	3.8	7.7
Gas, Water, Electricity (Production and Supply) ...	11,398	343	11,741	.9	0.1	.5
Building ... ..	46,485	169	46,654	3.5		
Roads, Railways, Earthworks, etc. ... ..	86,016	166	86,182	6.5		
Total, Industrial ...	296,692	49,434	346,126	22.5	3.9	13.3
Transport and Communication	86,702	4,010	90,712	6.6	.3	3.5
Commerce and Finance ...	129,965	42,811	172,776	9.9	3.3	6.6
Public Administration and Professional ... ..	51,249	41,702	92,951	3.9	3.3	3.6
Entertainment, Sport and Recreation ... ..	8,115	1,742	9,857	.6	.1	.4
Personal and Domestic Service...	20,536	70,458	90,994	1.6	5.5	3.5
No Industry or Industry not stated* ... ..	51,918	25,002	76,920	3.9	2.0	3.0
Pensioners ... ..	49,027	56,229	105,256	3.7	4.4	4.0
Total, Breadwinners ...	912,591	297,214	1,209,805	69.2	23.2	46.5
Dependants ... ..	405,880	985,162	1,391,042	30.8	76.8	53.5
Total Population ...	1,318,471	1,282,376	2,600,847	100.	100.	100.

\* Includes unemployed persons for whom industry was not stated, also persons described as Independent.

Amongst the males, nearly 31 per cent. were dependants (mostly children); 13 per cent. were engaged in rural pursuits and  $3\frac{1}{2}$  per cent. in other primary industries;  $22\frac{1}{2}$  per cent. in industrial pursuits, about half being in manufacture; 10 per cent. in commerce and finance, and  $6\frac{1}{2}$  per cent. in transport and communication.

Of the females classified as bread winners, the domestic group was the largest. It represented  $5\frac{1}{2}$  per cent. of the total females; 4 per cent. were in industrial occupations, mainly manufacture; 3 per cent. in commercial pursuits; and a similar proportion in the public administration and professional group, which includes teachers and nurses. There has been an appreciable increase in the proportion of bread-winners amongst females since the previous census, though owing to changes in classification the exact extent of the increase cannot be gauged. The proportion as recorded in 1921 was 16.8 per cent., but it is probable that many pensioners were excluded. In 1933 the proportion, exclusive of pensioners, was 18.8 per cent.

A comparative statement showing the grades of occupation as at each census from 1901 to 1933 is shown below. Dependants and others who may not be classified under the other categories are grouped under the heading "grade not applicable."

Grade.	Number.				Per cent. of Total.			
	1901.	1911.	1921.	1933.	1901.	1911.	1921.	1933.
Males.								
Employer ... ..	48,920	68,582	44,700	57,301	6.9	8.1	4.2	4.3
Working on own account ... ..	65,577	49,676	104,483	118,402	9.2	5.9	9.9	9.0
Unremunerated assistant ... ..	17,635	20,387	9,710	13,852	2.5	2.4	.9	1.1
Salary and wage earner ... ..	290,203	393,616	455,959	443,862	41.0	46.5	43.0	33.7
Unemployed ... ..	21,110	16,210	54,028	189,666	3.0	1.9	5.1	14.4
Grade not applicable ... ..	264,910	298,038	391,753	493,754	37.4	35.2	36.9	37.5
Not stated ... ..	1,650	11,189	10,868	1,634	...	...	...	...
Total ... ..	710,005	857,698	1,071,501	1,318,471	100	100	100	100
Females.								
Employer ... ..	4,933	5,672	3,192	5,774	.8	.7	.3	.4
Working on own account ... ..	16,780	12,827	17,280	18,811	2.6	1.6	1.7	1.5
Unremunerated assistant ... ..	6,077	4,869	1,256	1,891	.9	.6	.1	.1
Salary and wage earner ... ..	72,190	101,815	130,294	158,459	11.2	12.9	12.7	12.4
Unemployed ... ..	3,639	2,700	7,612	32,776	.6	.4	.8	2.6
Grade not applicable ... ..	540,911	660,030	866,379	1,064,160	83.9	83.8	84.4	83.0
Not stated ... ..	311	1,123	2,857	505	...	...	...	...
Total ... ..	644,841	789,036	1,028,870	1,282,376	100	100	100	100

In 1933 employers represented 4 per cent. of the male population, 9 per cent. were working on their own account and not employing labour, and 48 per cent. were in the wage-earning group (including the unemployed). The balance, 39 per cent., consists for the most part of dependants, pensioners, and persons with private means not actively engaged

in business. These ratios are similar to those prevailing at the census of 1921; at the earlier census dates there was a larger proportion of employers. The outstanding change during the period lies in the increase in the proportion unemployed, which is discussed later.

Of the females employers and women working on their own account represented only 2 per cent., and the proportion in the wage-earning group was 15 per cent. in 1933, as compared with 13½ per cent. in 1921.

At the Census of June, 1933, the wage-earning group numbered 824,763, vi.:—Salary and wage-earners, 443,862 men and 158,459 women, and unemployed, 189,666 men and 32,776 women. A classification according to industries is shown below:—

Industry.	Wage Earning Group.			Per cent. of Total.		
	Males.	Females.	Total.	Males.	Females.	Total.
Agricultural, Pastoral, Dairying	78,080	1,068	79,148	12·6	0·6	9·9
Forestry ... ..	3,971	38	4,009	0·6	0·0	0·5
Fishing and Trapping ... ..	1,064	8	1,072	0·2	0·0	0·1
Mining and Quarrying ... ..	30,664	64	30,728	5·0	0·0	3·8
Industrial—						
Manufacture ... ..	136,000	44,441	180,441	21·9	24·2	22·5
Gas, Water, Electricity (Pro- duction and Supply) ...	11,237	343	11,580	1·8	0·2	1·4
Building ... ..	39,013	158	39,171	6·3	0·1	4·9
Roads, Railways, Earth- works, etc.* ... ..	84,631	163	84,794	13·7	0·1	10·5
Total Industrial ...	270,881	45,105	315,986	43·7	24·6	39·3
Transport and Communication ...	76,803	3,872	80,675	12·4	2·1	10·1
Commerce and Finance ... ..	95,832	37,225	133,057	15·5	20·3	16·6
Public Administration and Pro- fessional † ... ..	42,073	32,666	74,739	6·8	17·8	9·3
Entertainment, Sport and Recrea- tion ... ..	6,388	1,654	8,042	1·0	0·9	1·0
Personal and Domestic Service	13,843	62,001	75,844	2·2	33·7	9·4
No Industry or Industry Not Stated ... ..	13,929	7,534	21,463	...	...	...
Total ... ..	633,528	191,235	824,763	100	100	100

\* Includes labourers, industry undefined.

† Includes clerks and typists, industry undefined.

The distribution of the male salary and wage-earners was: Rural 13 per cent., mining 5 per cent., industrial 44 per cent., distribution and commercial 28 per cent., administrative and professional 8 per cent., and personal and domestic 2 per cent.

The largest group of female salary and wage-earners were: Personal and domestic 34 per cent., factories 24 per cent., commercial 20 per cent., administrative and professional 19 per cent. Only a small proportion were engaged in primary production.

Details as to the unemployed in the principal industries are shown later in this chapter.

#### *Employment—Annual Records.*

Returns relating to the number of persons employed in the principal rural industries of the State are collected annually, but the information is not comparable with the census figures, because it relates only to persons engaged

regularly on rural holdings of one acre or over. Occupiers and managers are included in the annual returns, also members of their families, who work constantly on a holding, but temporary hands and contract workers engaged for harvesting, shearing, etc., are omitted. Moreover, the census figures relate to a specific date, the workers being distributed amongst the several branches of rural industry according to the work on which they were engaged at the time. On the other hand, the annual records show the average number employed during the period, and those engaged on each of the numerous holdings where more than one class of rural production is undertaken are distributed according to the main purpose for which the holding was used.

In regard to the number of females employed in rural industries, considerable difficulty is experienced in obtaining satisfactory statistics, owing to the fact that a large number of women and girls, especially on dairy farms, are employed only partly in rural production in conjunction with their domestic duties. Usually they do not receive wages, and at a census they are classified as dependants. In the annual returns there is a tendency to include them as rural workers, consequently a wide discrepancy arises between the census and the annual records, the latter being overstated.

The following statement shows the number of persons engaged as working proprietors, unpaid relatives assisting, and permanent employees in the various branches of rural industry in various years since 1911. Casual employees are not included.

Year.	Agriculture, Poultry, Pig, and Bee-keeping.		Dairying.		Pastoral.		Total, Rural Industries.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Total.
1911	58,299	1,141	27,488	11,293	43,387	770	129,174	13,204	142,378
1920-21	50,162	1,509	26,648	13,176	43,766	1,022	120,576	15,707	136,283
1925-26	44,991	841	30,351	15,027	45,652	420	120,994	16,288	137,282
1926-27	43,268	866	29,106	12,525	47,546	854	119,920	14,245	134,165
1927-28	43,953	713	29,845	12,378	46,882	453	120,680	13,544	134,224
1928-29	40,058	606	30,997	9,765	46,808	306	117,863	10,677	128,540
1929-30	39,860	472	32,494	9,105	44,069	271	116,423	9,848	126,271
1930-31	40,163	518	33,977	8,735	40,849	290	114,980	9,543	124,522
1931-32	39,382	390	36,601	7,923	40,946	209	116,929	8,522	125,451
1932-33	42,556	400	38,196	7,788	41,043	157	121,795	8,345	130,140
1933-34	42,084	301	38,358	7,246	43,748	229	124,190	7,776	131,966
1934-35	42,135	374	38,231	6,823	46,042	213	126,408	7,410	133,818
1935-36	42,204	339	38,150	6,481	46,771	238	127,125	7,058	134,183

\* Including proprietors working on their own holding.

The number of persons engaged in cultivating, etc., has been fairly constant during the last four seasons at about 42,500. It is appreciably lower than it was ten years ago, though the area under cultivation has increased, the greater use of machinery and the substitution of motor for horse-drawn vehicles having lessened the need for workers in agriculture. The decrease in permanent employees may have been offset, to some extent, by the employment of contract workers. Details regarding the labour engaged in relation to machinery used in cultivating are shown in the chapter relating to agriculture.

The number of male dairy workers has shown little variation during the last four seasons, but it is nearly 26 per cent. higher than in 1925-26.

In the pastoral industry the number of permanent employees increased from 41,000 in 1928-29 to 47,000 in 1935-36, when it was slightly higher than in 1925-26.

On the whole, the number of men engaged permanently on rural holdings of one acre and over in extent which had been about 120,000 for eight seasons, began to decline in 1928-29, and fell in the course of three seasons to 115,000. It has risen since to 127,000.

The figures in the table indicate that there has been a marked decrease in the number of women engaged in rural work, and this may be attributed mainly to the exclusion from the returns in recent years of women whose chief occupation is domestic rather than rural. The majority of the women are relatives not receiving wages, and the number so classified in the returns decreased from 13,841 in 1925-26 to 5,409 in 1935-36, while the number of women classified as working proprietors or paid employees declined from 2,447 to 1,649.

The total number of rural workers in 1935-36 included 69,353 men and 963 women, who were classed as working proprietors, *i.e.*, owners, lessees, or share-farmers working on the holdings; 18,668 men and 5,409 women were classed as relatives employed constantly, but not receiving wages. There were 39,104 men and 686 women, including managers and relatives, in receipt of wages. The amount of wages paid to these employees in 1935-36 was £3,999,209 to men and £28,286 to women, excluding the value of board, etc., assessed at £1,535,029 for men and £20,853 for women. In addition, wages, amounting to £2,692,599, were paid to casual workers, excluding £352,971, the value of board, etc. Particulars regarding rural labour and wages in the preceding decennium are shown in the chapter of this Year Book entitled Rural Settlement.

Annual returns relating to employment are collected also in respect of mining and other primary industries and the manufacturing industries, and the figures for various years since 1911 are summarised in the following statement. In regard to the manufacturing industries, employees in

establishments with fewer than four persons have not been included unless machinery was used in the factory, and the figures shown in the table represent the average number employed in the factories during each year:—

Year.	Rural Industries.	Forests, Fisheries, and Trapping.	Mining.	Manufacturing.			Total.		
	Total.	Males.	Males.	Males.	Females.	Total.	Males.	Females.	Total.
1911	142,378	6,000	33,367	79,005	25,546	104,551	247,546	38,750	286,296
1920-21	136,283	6,700	25,612	107,700	31,511	139,211	260,588	47,218	307,806
1925-26	137,282	7,900	29,186	128,846	40,928	169,774	286,926	57,216	344,142
1928-29	128,540	7,700	26,562	135,773	44,983	180,756	287,898	55,660	343,558
1929-30	126,271	6,300	25,010	122,005	40,908	162,913	269,738	50,756	320,494
1930-31	124,532	5,600	18,370	93,881	33,724	127,605	232,840	43,267	276,107
1931-32	125,451	6,000	17,721*	90,667	35,688	126,355	231,317	44,210	275,527
1932-33	130,140	6,800	17,721*	99,718	38,786	138,504	246,034	47,131	293,165
1933-34	131,966	7,200	16,933	111,599	42,400	153,999	259,922	50,176	310,098
1934-35	133,818	7,500	17,816	127,114	47,919	175,033	278,838	55,329	334,167
1935-36	134,183	7,500	17,864	140,896	52,304	193,200	293,385	59,362	352,747

Note.—Working Proprietors are included in all groups. \*Calendar year 1932.

Employees engaged in treating minerals at the place of production are included in the returns of the manufacturing industries, and not with the mining employees, viz., those engaged in the manufacture of coke at coke works, in the manufacture of lime, cement, etc., at limestone quarries, and in the treatment of ores at mines. The number of miners, as stated for the 1920-21 and later years, is exclusive of fossickers.

In the coal mines employment increased from 17,000 in 1911 to 21,000 in 1921, and to 24,000 in 1926. Subsequently the industry was affected severely by industrial strife and by trade depression, and the number of coal-miners was only 14,100 in 1932 and 12,800 in 1935.

In other mines employees increased from 4,639 in 1921 to 5,061 in 1926, then declined to 2,848 in 1931. With the revival in gold mining and improvement in silver, lead and tin mines, the number rose steadily to 5,076 in 1935. The total number of miners in the year 1936 was 18,890, viz., coal, 13,515, and other, 5,375.

The number of factory workers did not vary greatly between 1926-27 and 1928-29, then there was a decrease of 54,400 before the fall was arrested in 1931-32. In each of the following years there was a substantial increase, and the number in 1935-36 was 12,400 above pre-depression levels. The improvement has been fairly general throughout the various classes of factories. The majority of female factory workers are engaged in the clothing trades, and fluctuations in the number of female employees reflect generally the condition of that group of industries. Monthly data as to employment in factories is shown on page 785 in the chapter relating to factories.

*Government Employees.*

In New South Wales a large number of persons are employed by the State and Commonwealth Governments. In addition to services such as education, police, justice, health, lands administration, and the construction of public works, etc., the State owns railways, tramways, omnibuses and wharves and abattoirs. The Commonwealth services include the post office, telegraphs and telephones, customs, taxation, and defence.

The following statement shows the number of Government employees, as at 30th June, in various years from 1929 to 1937.

Details are shown separately regarding the State employees engaged mainly in administrative services and the staffs of business undertakings and statutory bodies. Amongst the latter group there are a number of persons who are engaged in the construction of public works. Part-time relief workers are not included in the statement.

Services.	1929.	1931.	1932.	1934.	1935.	1936.	1937.		
							Males.	Females.	Total.
State.									
Administrative, etc.— Public Service Board— Teachers (including Inspectors) ... .. Hospitals, etc.—General Staffs... .. Other ... ..	10,807 2,514 9,284	11,471 2,586 9,311	11,155 2,597 9,261	11,207 2,910 9,485	11,220 3,011 9,783	11,198 3,057 9,629	5,745 1,274 7,484	5,526 1,439 2,241	11,271 2,713 9,725
Total, Public Service Board.	22,605	23,368	23,013	23,602	24,014	23,884	14,503	9,206	23,709
Police ... .. Fire Commissioners ... .. Government Savings (Rural) Bank of New South Wales Miscellaneous ... ..	3,569 828 1,704 2,662	3,717 833 1,690 2,598	3,656 821 337 2,886	3,669 827 510 3,104	3,631 827 663 2,956	3,909 826 941 3,119	3,829 798 769 2,430	14 32 276 1,024	3,843 830 1,045 3,454
Total, Administrative, etc.	31,368	32,206	30,713	31,712	32,091	32,679	22,329	10,552	32,881
Business Undertakings and Construction— Railways ... .. Road Transport and Tramways ... .. Maritime Services Board Water Conservation and Irrigation Commission Dept. of Main Roads ... Metropolitan Water; Sewerage and Drainage Board ... .. Hunter District Water and Sewerage Board Metropolitan Meat Industry Commission ... Miscellaneous ... ..	58,011 1,232 1,548 3,695 5,715 542 674 7,372	51,174 727 1,058 1,343 1,894 270 704 5,238	49,810 619 1,050 1,358 1,801 336 676 4,145	39,097 8,801 1,232 1,854 3,400 297 683 2,293	41,000 9,145 1,110 3,131 3,190 349 705 2,858	40,922 9,357 767 3,032 3,510 292 773 1,623	41,371 9,787 867 3,531 10,224 316 1,354 1,539	1,392 195 46 73 101 41 28 209	42,763 9,982 913 3,604 10,325 357 1,382 1,748
Total Business Undertakings and Construction...	78,789	62,408	59,795	58,339	62,834	61,344	70,088	2,116	72,204
Total, State ... ..	110,157	94,614	90,508	90,051	94,925	94,023	92,417	12,668	105,085
Commonwealth.									
Public Service Commission .. Defence, Repatriation and War Service Homes ... Other... ..	14,824 1,902 1,159	11,557 1,512 1,422	11,844 1,712 3,022	12,142 1,892 2,598	12,049 1,779 2,739	13,178 1,858 2,834	11,878 1,754 2,372	2,083 274 615	13,961 2,028 2,987
Total Commonwealth in N.S.W. ... Total, Government Employees in N.S.W. ... ..	17,885 128,042	14,491 109,105	16,578 107,086	16,632 106,683	16,567 111,492	17,870 111,893	16,004 108,421	2,972 15,640	18,976 124,061

The total number of persons employed by the Government of New South Wales at 30th June, 1937, was 105,085. Of these, 32,881 were in the administrative departments, 11,271 or more than 34 per cent. being teachers. The employees in business undertakings and construction numbered 72,204, of whom the railway and tramway employees numbered 52,745 or 73 per cent., and 10,325 were employed by the Metropolitan Water, Sewerage and Drainage Board. Additional employment in the construction of public works and the transfer of part-time relief workers to full-time employment were the main factors in the increase in the number of State Government employees during the year 1936-37. The staff of the Metropolitan Meat Industry Commission was increased also when a new system of slaughtering was introduced during the year so that men previously engaged by the butchers are now employed by the Commission. The number of State Government employees in June, 1937, was less by 5,072 than in June, 1929. In the administrative services there was an increase of 1,513, but there were decreases in respect of all the business undertakings and statutory bodies except the Metropolitan Water, Sewerage and Drainage Board and the abattoirs.

#### VOLUME OF EMPLOYMENT AND UNEMPLOYMENT.

Prior to 1933 the only records of total employment and unemployment in New South Wales were those obtained at the decennial census. The first such record was obtained in 1891, and subsequent census records were on a substantially comparable basis. These are shown below in comparison with an estimate for 1937 based on the census of 1933 with an adjustment for subsequent increase in number of wage-earners and for increase in numbers in employment as shown by wage tax returns. The numbers shown as unemployed include those unemployed on account of illness, accident, "voluntarily," etc., but are mainly those unemployed through scarcity of work.

#### *Employment and (all causes) Unemployment.*

Year.			Wage Earners.  Employed.	Unemployed.(a)	Total.	Proportion Unemployed (All causes).
						Per cent.
Census, 1891 (April)	...	...	278,093	22,328	300,421	7·4
Census, 1901 (March)	...	...	362,393	24,749	387,142	6·4
Census, 1911 (April)	...	...	495,431	18,910	514,341	3·7
Census, 1921 (April)	...	...	586,253	61,640	647,893	9·5
Census, 1933 (June)	...	...	602,321	222,442 (c)	824,763	27·0
Estimate, 1937 (June)	...	...	800,400	(c)81,600 (b)	882,000 (b)	9·3

(a) Unemployed all causes—including illness, etc., and including some normally self-employed who were without occupation and recorded themselves as unemployed at the Census.

(b) Including relief workers.

(c) Including approximately 15,000 unemployed through sickness, accident, etc., and causes other than shortage of work.

In 1901 recovery from the long continued depression of the previous decade had been proceeding slowly for some years, and the proportion of unemployment was still approximately the same as it was in 1891—a few years before the worst point of the intervening depression had been reached. The growth of prosperity was approaching its zenith in 1911, and unemployment was at a relatively low level. In the years immediately following there developed an acute shortage of skilled labour. The Census of 1921 was held at a time of trade reaction from the post-war

boom, and unemployment was considered to be at an abnormally high level having regard to the experience up to that time. The post-war depression in New South Wales was slight and short lived as compared with that which commenced in 1929. The Census of June, 1933, occurred at a time when economic recovery had been proceeding steadily for a little over a year. It was believed that the ratio of unemployment at its worst point had been in the vicinity of 33 per cent. in the first half of 1932. Economic recovery proceeded uninterruptedly and was still proceeding at June, 1937, by which date unemployment due to all causes was estimated to be in the vicinity of 9 per cent.

The number of unemployed at the Census of 1891 was ascertained from the enumerators' classification. The number included as unemployed on account of sickness and old age in 1901 was 4,694, or 1.2 per cent. of the total wage-earners. At the Census of 1901 and 1911 persons were classified as being unemployed if out of work for more than a week immediately prior to the Census. Information as to cause of unemployment was not obtained at the Census of 1911, but all persons unemployed for a year or more were classified as permanently incapacitated for work and were excluded from the wage-earning and unemployed groups.

At the Census of 1921 and 1933 all persons who stated that they were unemployed at the time of the Census (including all who recorded themselves as unemployed for one day or more) were included as unemployed. Owing to the long continued severity of the depression which began in 1929 most of the unemployed recorded at the Census of 1933 had been unemployed for periods ranging up to four years. Less than 10 per cent. of the total had been unemployed for more than four years.

Comparative numbers of employed and unemployed according to sex at each Census from 1901 to 1933 are shown below:—

Particulars.				1901.	1911.	1921.	1933.
Wage earning Group—							
Males	...	...	...	311,313	409,826	509,987	633,528
Females	...	...	...	75,829	104,515	137,906	191,235
Total	...	...	...	387,142	514,341	647,893	824,763
Unemployed—							
Number—Males	...	...	...	21,110	16,210	54,028	189,666 (a)
Females	...	...	...	3,639	2,700	7,612	32,776 (a)
Total	...	...	...	24,749	18,910	61,640	222,442 (a)
Per cent. of Wage-earning Group—							
Males	...	...	...	6.8	4.0	10.6	29.9 (a)
Females	...	...	...	4.8	2.6	5.5	17.1 (a)
Total	...	...	...	6.4	3.7	9.5	27.0 (a)

(a) Including 15,142 persons or 1.8 per cent. of total wage earners unemployed on account of illness, accident and causes other than scarcity of work.

The "wage-earning group" includes all persons employed on wages or salary, including "employed part time" and all who were recorded as unemployed. Persons working on their own account and unpaid helpers are excluded, except to the extent that they were without occupation and recorded themselves as unemployed.

The persons stated to be unemployed in June, 1933, included 8,971 males and 3,427 females who did not supply information as to the cause of their unemployment; 169,583 males and 25,319 females out of work on account of scarcity of employment; and 11,112 males and 4,030 females whose unemployment was stated to be due to some other cause. If the last-mentioned group be excluded, the proportion of male wage-earners unemployed owing to business depression was 28.2 per cent., and the proportion of female wage-earners 15 per cent.

The number of unemployed persons under 21 years of age of whom it was stated that they had not been employed prior to the Census was 12,108, viz., 7,856 boys and 4,252 girls.

The following table shows the number and proportion of males and females in various industrial groups who were returned as unemployed at the census of 1933 :—

Industry.	Wage-earning Group.			Percentage in each Industry.	
	Employed.	Un-employed.	Total.	Employed.	Un-employed.
<i>Males.</i>					
Agricultural, Pastoral and Dairying ...	65,254	12,826	78,080	83·6	16·4
Forestry, Fishing, and Trapping ...	4,122	923	5,035	81·7	18·3
Mining and Quarrying ...	18,008	12,656	30,664	58·7	41·3
Industrial—					
Manufacture ...	98,122	37,878	136,000	72·1	27·9
Gas, Water, Electricity (Production and Supply) ...	9,034	2,203	11,237	80·4	19·6
Building ...	15,436	23,577	39,013	39·6	60·4
Roads, Railways, Earthworks, etc. *...	39,557	45,074	84,631	46·7	53·3
Total, Industrial ...	162,149	108,732	270,881	59·9	40·1
Transport and Communication ...	64,563	12,240	76,803	84·1	15·9
Commerce and Finance ...	77,193	18,639	95,832	80·6	19·4
Public Administration and Professional†	36,332	5,741	42,073	86·4	13·6
Entertainment, Sport and Recreation ...	4,755	1,633	6,388	74·4	25·6
Personal and Domestic Service ...	10,563	3,280	13,843	76·3	23·7
No Industry or Industry Not Stated ...	933	12,996	13,929	6·7	93·3
Total, Males ...	443,862	189,666	633,528	70·1	29·9
<i>Females.</i>					
Agricultural, Pastoral, Dairying, etc. ...	1,163	15	1,178	98·7	1·3
Industrial ...	36,890	8,215	45,105	81·8	18·2
Transport and Communication ...	3,734	138	3,872	96·4	3·6
Commerce and Finance ...	32,988	4,237	37,225	88·6	11·4
Public Administration and Professional†...	28,695	3,971	32,666	87·8	12·2
Entertainment, Sport and Recreation ...	1,361	293	1,654	82·3	17·7
Personal and Domestic Service ...	53,031	8,970	62,001	85·5	14·5
No Industry or Industry not stated ...	597	6,937	7,534	7·9	92·1
Total, Females ...	158,459	32,776	191,235	82·9	17·1
Grand Total (Males and Females) ...	602,321	222,442	824,763	73·0	27·0

\* Includes Labourers, industry undefined.

† Includes clerks and typists, industry undefined.

The duration of unemployment was stated in respect of 174,164 males and 26,280 females, at the Census of 1933, as shown below:—

Duration.	Number.			Per cent. of Total.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 3 months ...	16,245	5,316	21,561	9·3	20·2	10·8
3 months and under 6 ...	12,805	3,161	15,966	7·4	12·0	8·0
6 months and under 12...	21,059	4,461	25,520	12·1	17·0	12·7
1 year and under 2 ...	25,276	4,469	29,745	14·5	17·0	14·8
2 years and under 3 ...	37,537	4,627	42,164	21·6	17·6	21·0
3 years and under 4 ...	43,071	3,051	46,122	24·7	11·6	23·0
4 years and over ...	18,171	1,195	19,366	10·4	4·6	9·7
Not stated ...	15,502	6,496	21,998	...	...	...
Total ...	189,666	32,776	222,442	100	100	100

Of the males unemployed in June, 1933, more than 71 per cent. had been without regular employment for a year or more, and 35 per cent. for three years or over. The average period of unemployment was much shorter in the case of females, though 51 per cent. of them had been unemployed for at least a year. In contrast, the records of the Census of 1921 indicate that the proportion of both males and females unemployed for more than three months was less than 29 per cent.

### *Employment and Unemployment Since 1933.*

In view of the great importance (both from the standpoint of public policy and of economic analysis) of maintaining as accurate a record as possible of the volume of employment and unemployment, endeavour has been made to provide a reliable monthly record comparable with that obtained at the Census of 1933.

Comprehensive records of numbers of employees on pay rolls have been derived from information supplied by employers in remitting wages tax and from records of persons in Government employment. The number of wage and salary earners in employment of whom direct record is not available is relatively small, and is considered to vary in the same ratio as does recorded employment. The resultant monthly record of total numbers in employment is therefore a close approximation to the actual totals.

While this information is of great value in itself, endeavour has been made to render it more useful by relating it to the numbers available for employment. In this way there have been derived approximate percentages representing the proportion of wage-earners in employment and residual percentages representing the approximate proportion of wage-earners unemployed. The indexes so constructed were made to relate to wage-earners available for employment by excluding those who recorded themselves as unemployed on account of illness, accident, etc., at the Census of 1933.

The main element of approximation in these estimated ratios of employment and unemployment arises from minor difficulties encountered in estimating the number of wage-earners. Without going into detail of the very extensive investigations made, it may be noted briefly that factors such as the following affect the accuracy of estimates of number of wage-earners at dates subsequent to the Census of 1933:—

- (a) The Census was taken at an abnormal period, when opportunities for employment were very restricted. This may have had several special effects, viz., some persons normally working on their own account who had been for a considerable period without occupation probably recorded themselves as unemployed; some adolescents who would under normal circumstances have sought employment remained at school or at home or in family businesses assisting without wages.
- (b) It is always possible that the uneven growth of avenues of employment subsequent to the Census of 1933, extending latterly to the creation of a shortage of certain classes of skilled labour and a general shortage of female and juvenile labour, may have attracted into employment some who at the time of the Census were recorded as dependants. Again, the conditions under which extensive relief works and full-time Governmental works were made available subsequent to the Census may have had a corresponding effect in relation to persons such as hawkers, small shopkeepers, small farmers, etc.
- (c) Interstate and oversea migration of wage-earners is not recorded as such, but as the total migration was relatively small between 1933 and 1937, difficulty on this account is relatively unimportant.

The number of wage-earners in the population in the four years following the Census of 1933 has been estimated as a constant proportion of the total population of working age as derived from Census records of ages and subsequent records of deaths of persons of those ages, with an adjustment for migration. Between the Censuses of 1911, 1921, and 1933 this proportion rose slightly, and it is probable that allowance for a similar trend should be made since 1933.

A close analysis of all available data leads to the conclusion that the various possibilities of error in estimating the number of available wage-earners due to special factors at and since the Census of 1933 neutralise each other. The only probable adjustment needed in the indexes published below is on account of a continuing trend towards increase in ratio of wage-earners to population of working age. Adjustment on that account, if made on the basis of the inter-censal experience (1921 to 1933), would increase the estimated number of available wage-earners by approximately 1 per cent. above the number actually arrived at on the basis of estimate adopted as at June, 1937. In that event the percentages of employment would be nearly 1 per cent. less and of unemployment nearly 1 per cent. more than those shown in the following table as at June, 1937. This margin of error would diminish progressively through the ratios month by month back to the Census date.

The following percentages of employment and unemployment are believed to have a much greater degree of precision than is usually associated

with such indexes. There is, however, an inherent difficulty in determining the employment and employability of a small section of the wage-earning population, and determination of aggregate percentages of employment and unemployment must in any circumstances involve approximations. The following estimates are considered to represent with a near approach to accuracy the changes in ratios of total employment and unemployment that have occurred in New South Wales since the Census of 1933:—

Middle of Month.	Percentage of employed and unemployed amongst persons (males and females) dependent upon and available for employment—*				Number of persons in—	
	Part-time Relief Workers included as employed at full-time equivalent.		Part-time Relief Workers included as unemployed.		Private employment.	Governmental and Private employment.
	Employed.	Unemployed.	Employed.	Unemployed.		
1933—June (Census June 30)	74.4	25.6	73.5	26.5	478,000	594,000
September	76.0	24.0	74.8	25.2	491,000	608,000
December	79.3	20.7	77.2	22.8	511,000	630,000
1934—March ...	79.5	20.5	77.1	22.9	513,000	632,000
June ...	80.5	19.5	77.8	22.2	519,000	640,000
September	82.6	17.4	80.0	20.0	540,000	660,000
December	86.0	14.0	83.7	16.3	570,000	694,000
1935—March ...	84.4	15.6	81.9	18.1	557,000	682,000
June ...	85.9	14.1	83.1	16.9	567,000	695,000
September	88.4	11.6	85.6	14.4	591,000	720,000
December	91.3	8.7	88.8	11.2	620,000	750,000
1936—January ...	87.2	12.8	85.0	15.0	590,000	719,000
February ...	87.7	12.3	85.5	14.5	595,000	724,000
March ...	88.9	11.1	86.7	13.3	606,000	735,000
April ...	89.0	11.0	86.9	13.1	609,000	738,000
May ...	89.8	10.2	87.6	12.4	617,000	745,000
June ...	89.3	10.7	87.1	12.9	614,000	742,000
July ...	89.7	10.3	87.6	12.4	617,000	747,000
August ...	89.4	10.6	87.5	12.5	617,000	748,000
September	90.0	10.0	88.6	11.4	626,000	758,000
October ...	91.4	8.6	90.0	10.0	637,000	771,000
November	91.6	8.4	90.1	9.9	638,000	773,000
December	92.9	7.1	91.5	8.5	650,000	786,000
1937—January ...	90.4	9.6	89.2	10.8	631,000	767,000
February ...	92.2	7.8	90.8	9.2	644,000	782,000
March ...	92.2	7.8	90.8	9.2	644,000	783,000
April ...	92.6	7.4	91.3	8.7	647,000	789,000
May ...	93.1	6.9	91.9	8.1	650,000	795,000
June ...	93.5	6.5	92.3	7.7	653,000	800,000

\*Persons unemployed on account of illness, accident, etc., are excluded. These numbered 15,142 or 1.8 per cent. of wage earners at the census of 1933. The percentages unemployed here shown relate to those unemployed on account of scarcity of work.

The index of unemployment has fallen to such an extent since June, 1933, that the proportion of wage-earners unemployed (including part-time relief workers) in June, 1937, was only one-quarter of the proportion four years earlier. In each year the index has declined month by month from January to December, then after a rise in January due to a diminution in business activity during the holiday season, the upward trend of employment has commenced again.

The number of persons in private employment increased from 473,000 to 653,000 between June, 1933, and June, 1937, the increases in successive years being 41,000, 48,000, 47,000, and 39,000.

*Employment in Factories and Shops.*

An index of employment in factories in New South Wales during the years 1925-26 to 1936-37, and in each month since July, 1935, is shown below, with the year 1928-29 as base, equal to 100. The annual movement in factory employment in relation to the increase in population of working age is shown also by means of an index:—

Year ended June.	Average Number of Employees in Factories (including Working Proprietors).		Index of Factory Employment (divided by Index of Population of Working Age (16-64 years).	Middle of Month.	Estimated Number of Employees in Factories (including Working Proprietors).			
	Persons.	Index (Base, 1928-29 = 100).			Persons.		Index (Base, 1928-29 = 100)	
					1935-36.	1936-37. (a)	1935-36.	1936-37. (a)
1926	169,774	94	102	July ...	183,100	199,200	101	110
1927	179,378	99	105	August ...	185,300	200,100	103	111
1928	177,698	99	102	September ..	188,500	202,400	104	112
1929	180,756	100	100	October ...	191,400	206,600	106	114
1930	162,913	90	88	November...	195,600	208,600	108	115
1931	127,605	71	68	December ..	196,500	209,100	109	116
1932	126,355	70	67	January ...	190,200	204,600	105	113
1933	138,504	77	72	February ...	193,600	211,100	107	117
1934	153,999	85	78	March ...	197,600	212,900	109	118
1935	175,033	97	88	April ...	197,400	210,600	109	117
1936	193,200	107	96	May ...	200,100	213,700	111	118
1937 (a)	207,900	115	101	June ...	199,200	216,200	110	120

(a) Preliminary, subject to revision. The monthly index is based on sample returns.

Factory employment in New South Wales declined by 30 per cent. between 1928-29 and 1931-32. In each succeeding year there was an appreciable increase offsetting by 1936-37 the decline since 1928-29, in the ratio of factory employees to the population of working age.

The course of employment in retail stores in each month since July, 1933, is illustrated by the following index, which relates to 599 establishments. Employment in these stores in July, 1933, is taken as a base, equal to 100; no adjustment has been made for increase in population:—

Month.	Index of Employment in Retail Stores.				Month.	Index of Employment in Retail Stores.			
	1933.	1934.	1935.	1936.		1934.	1935.	1936.	1937.
July ...	100	108	116	122	January ...	102	109	116	123
August ...	93	105	113	120	February ...	104	112	119	125
September ...	99	107	113	120	March ...	104	109	117	123
October ...	99	108	115	121	April ...	103	111	118	124
November ...	102	110	119	123	May ...	105	112	119	126
December ...	113	123	133	137	June ...	105	112	120	126

## INTERMITTENCY OF EMPLOYMENT.

A considerable loss of working time occurs in many industries even in normal periods on account of intermittency arising from various causes and, under adverse conditions which have been affecting business activity, the practice of "rationing" the available work amongst employees led to intermittency in many occupations not usually affected by it.

Information regarding the extent of intermittency in respect of the principal coal mines is collected by the Department of Labour and Industry. Particulars obtained from these records show that during the year 1936 the average loss was 105 days out of 269 working days, including 4 days through disputes and 101 on account of other causes.

The corresponding figures for 1935 were 273 working days, 5 days lost owing to disputes, and 36 through other causes.

The total loss of working time involved by the interruptions to work in coal mines during the five years 1932-1936 is shown below. The figures have been obtained by multiplying the number of days on which the collieries were idle by the number of employees affected, and by classifying the working days lost according to the cause of the dislocation.

The average number of days lost on account of dislocations in this industry during the period of five years was 1,444,468 days per annum. Eighty per cent. of the loss was attributed to lack of trade or of shipping and nearly 9½ per cent. to industrial disputes.

Causes.	Days Lost in Coal Mines.						
	1932.	1933.	1934.	1935.	1936.	1932-36.	
						Average per Annum.	Per cent. of Total.
Industrial disputes..	82,568	36,068	117,108	156,176	215,458	121,476	9.4
Truck shortage .....	47,506	75,124	92,403	1,019	9,379	45,086	3.5
Slackness of trade...	1,830,054	1,611,303	918,368	401,378	431,609	1,038,542	80.0
Mine disabilities, etc.	100,182	76,896	145,487	27,308	11,790	72,333	5.6
Deaths of employees	4,914	3,746	7,421	5,728	7,278	5,817	.4
Meetings, extra holi- days ... ..	220	3,390	4,287	10,266	7,392	5,111	.4
Other causes ...	13,495	5,731	179	2,533	26,426	9,673	7
Not stated ...	245,827	275,016	187,327	3,440	20,542	146,430	...
Total ...	2,324,766	2,087,274	1,472,580	607,848	729,874	1,444,468	100

#### RELIEF OF UNEMPLOYMENT.

In 1936 and 1937 extensive investigations were made into the practicability of instituting a scheme of unemployment insurance in Australia and this subject was still under discussion between the Commonwealth and State Governments at the close of 1937. The State has not instituted any fund for the purpose, and there have not been any operations under a section of the Industrial Arbitration Act which authorises the Government to subsidise from public revenue unemployment insurance funds created by contributions of employers and employees.

Measures for the relief of unemployment undertaken by the State have been directed generally towards the organisation of the supply of labour by means of labour exchanges, and the assistance of persons in need of sustenance while seeking employment. In times of economic depression special works for the relief of unemployment have been organised by the exchanges, in co-operation with other Government departments.

*State Labour Exchanges.*

There are State Labour Exchanges, staffed by departmental officers, in Sydney, Newcastle, Wollongong, Goulburn, Lithgow and Broken Hill, and agencies are conducted in nearly 400 country localities—formerly by business men remunerated by fees, but since November, 1937, by local police officers. Fees are not charged for the services provided by the exchanges and agencies, expenses being paid by the State.

Persons over 14 years of age may register for employment, and they must report at least once a month to maintain registration. When work is available in a district, registered persons are summoned by press notices to report at the exchanges—usually in order of registration.

In recent years the exchanges have been active in the registration of the large number of unemployed persons in need of sustenance, and in the organisation of relief works.

In July, 1937, important changes were made in the system of State labour exchanges with a view to the placement of the residual unemployed in private industry and arrangements were made to convert the exchanges into employment bureaux supervised by an Employment Council with a staff of Employment Officers. At the same time the Government services such as food relief and charitable assistance were re-organised into a scheme of social aid with the object of fostering the welfare of the unemployed so that they may be fitted by training and medical care for work when available.

The Employment Council is charged with the general organisation of training and placement, and the co-ordination of the activities of advisory committees to be constituted for various trades. In August, 1937, it announced preliminary arrangements for placing and training young men between the ages of 18 and 25 years as emergency trainees in skilled occupations. The period of training is three years and the wages of trainees are to be supplemented by the State.

*Private Employment Agencies.*

Private employment agencies are subject to supervision by the State authorities in terms of the Industrial Arbitration Act. Such agencies may be conducted by licensed persons only, and they are required to keep registers of persons applying for labour or employment, and of engagements made. The scale of fees chargeable is fixed by regulation, and if an applicant does not obtain labour or employment within fourteen days, the fee must be repaid, less out-of-pocket expenses. Licensees are prohibited from sharing fees with employers, and from keeping as lodgers persons seeking employment.

At 30th June, 1937, there were 135 private agencies on the register, including 46 in Sydney, 68 in the suburbs, and 21 in the country.

In addition to these private agencies there were 6 licensed theatrical agencies. These licenses are issued subject to conditions for the protection of theatrical employees and for securing the payment of their salaries and expenses. Theatrical employers also may be required to hold permits to carry on business, but both employers and agencies may be exempted by Ministerial authority from these provisions of the law.

*Special Measures for the Relief of Unemployment.*

Substantial grants were made from the State revenues during the year 1929 for relief works and for sustenance in many cases of unemployment, and as the volume of unemployment expanded the Prevention and Relief

of Unemployment Act was passed in June, 1930, to make provision for further relief. A council was set up to formulate schemes to absorb unemployed persons in public works and private enterprises, to investigate schemes for relief and training, and to make recommendations regarding the expenditure of moneys available for the purposes of relief.

In order to provide the requisite funds, a special levy—the Unemployment Relief Tax—was imposed on salaries, wages and other income from employment as from 1st July, 1930, and on income from the other sources derived during the year ended 30th June, 1930, and later years. The proceeds were paid into the Unemployment Relief Fund and expenditures therefrom were subject to the approval of the Unemployment Relief Council until 1st July, 1932. Then the fund was merged into the Consolidated Revenue Fund, and became subject to Parliamentary appropriation. In December, 1933, the tax was replaced by a wages tax on income from employment, and a special income tax on other income. Particulars of the rates, proceeds, etc., are shown in the chapter of this volume entitled Public Finance.

#### *Works for the Relief of Unemployment.*

During the early stages of the depression sustenance was provided for rapidly increasing numbers of unemployed men and women under the food relief scheme described in the chapter "Social Condition" of this Year Book, and the expenditure on this form of relief amounted to £5,070,700 in 1931-32. In later years efforts were directed towards providing part time employment on public works, and in 1936 and 1937 this was gradually curtailed with a view to promoting full-time employment as far as practicable.

Employment on Government relief works was exempted, by proclamation in terms of the Prevention and Relief of Unemployment Act, from the provisions of industrial awards and agreements, and wages, hours and other conditions of employment on proclaimed works have been subject to Ministerial decision. Commencing in July, 1937, transition was gradually effected from this system to a system of rationed work at award rates of pay. Prior to 1932 relief work was provided for short periods for men who were replaced after two weeks' work. Later a scheme of rationed employment was introduced, with alternating periods on and off work, or, in some cases, work for a limited number of hours each week.

In May, 1933, a supplementary scheme, known as emergency relief work, was introduced by the State Government in co-operation with the councils of municipalities and shires. Under this scheme, the councils undertook works of a nature which would not ordinarily be carried out from their revenues and the State Government paid the wages of the men employed, and a proportion of the other costs, such as materials and incidental expenses.

At first emergency relief work was restricted to persons who were eligible for food relief and was not available to applicants with family income in excess of that applying in respect of food relief. Subsequently,

this rule was relaxed, and the scales of work—which varied according to the number of dependants in the worker's household—were increased, as shown in previous issues of this Year Book. Wages were paid on the basis of the living wage declared from time to time by the Industrial Commission, and from October, 1933, a bonus was added, the rate in 1936-37 being 75s. 2d. per week of 44 hours. Additional bonuses ranging from 1d. to 3d. per hour were paid for certain skilled or semi-skilled work.

In order to facilitate the gradual abolition of part-time emergency relief work, an Act was passed in December, 1935, to enable municipal and shire councils to raise loans, with Government assistance, for works which will provide full-time employment at award rates of wages. Then the Government entered into agreements with a large number of councils for approved works, the amount of Government subsidy being a matter of arrangement with individual councils. In addition, many relief workers employed by statutory bodies were transferred from part-time work to full-time, with award rates of wages, so that from 1st October, 1937, part-time relief work will be restricted, as far as practicable, to relief workers not absorbed under the full-time schemes. For these, works will be undertaken by Government departments or statutory bodies, the usual scale of work being two weeks in eight weeks, if single, or two weeks in four, if married. Since 1st September, 1937, wages have been paid at award rates.

The following statement shows the number of men employed on part-time relief work or in receipt of food relief at annual intervals since June, 1933. Minors are not eligible for relief work unless married and the figures relate generally to adults.

June.	Men employed on Part Time Relief Work by—			Men in receipt of Food Relief.	Total.
	Government Departments and Statutory Bodies.	Councils of Municipalities and Shires.	Total.		
1933	11,864	22,365	34,229	65,527	99,756
1934	28,838	46,810	75,648	17,865	93,513
1935	20,390	51,983	72,373	16,060	88,433
1936	9,209	46,561	55,770	18,202	73,972
1937	14,181	10,795	24,976	23,074	48,050

A decline of 47,600 in the number of men in receipt of food relief in the year 1933-34 was due mainly to their transfer to relief work. In the following year there was a decrease in both groups, then the number of part-time relief workers began to decrease rapidly, so that the number in June, 1937, was little more than one-third of the number in June, 1935. The decrease was offset to some extent by an increase in recipients of food relief. Nevertheless, the total number of men in receipt of relief by way of part-time work or food in June, 1937, was less by 51,700 than in June, 1933. The decreases in successive years were 6,200, 5,100, 14,500, and 25,900.

*Expenditure on Food Relief and Relief Works.*

The following statement shows the expenditure on food relief and charitable assistance for the unemployed, and on relief works. These amounts do not represent the total expenditure in respect of relief of unemployment. They are exclusive, for instance, of interest or other debt charges on loan moneys expended on relief, and of the additional cost of family allowances and charitable and social services arising from widespread unemployment. The figures are exclusive also of expenditure for the prevention of unemployment.

Year.	Expenditure from Revenue.					Expenditure from Loans. *
	Food Relief.	Cash Payments.	Grants and Loans for Relief Works.	Administrative Expenses, etc.	Total of Foregoing Items.	
	£	£	£	£	£	£
1930-31 ... ..	1,837,886	101,858	2,373,030	44,310	4,357,084	...
1931-32 ... ..	5,070,732	130,943	766,613	137,164	6,105,452	...
1932-33 ... ..	3,510,194	63,296	276,384	156,783	4,006,657	2,801,727
1933-34 ... ..	1,467,953	247,498	75,430	179,099	1,969,980	5,249,776
1934-35 ... ..	1,076,670	123,728	41,386	173,716	1,415,500	6,993,427
1935-36 ... ..	980,759	116,115	836,799	192,283	2,125,956	5,423,827
1936-37 ... ..	1,114,950	144,614	997,672	200,425	2,457,661	3,252,458

\* Amended since last issue.

## TRADE UNIONS.

The Trade Union Act of 1881-1936 provides for the registration of trade unions, the appointment of trustees, in whom the union property is vested, and for the constitution of rules. If union funds are used for political purposes payments must be made from a separate fund, to which contribution by members is optional.

There are two classes of trade unions, viz., unions of employers and unions of employees. The latter constitute the bulk of the registered organisations.

The organisation of employees in trade unions increased with the development of industrial arbitration, as unions formed for the purposes of arbitration must be registered under the Trade Union Act, as well as the Industrial Arbitration Act. Moreover, a wider recognition of the principle of preference to unionists led to an increase in membership.

After the introduction of the Commonwealth system of industrial arbitration in 1904 some of the unions previously on the State registry became merged into federal associations, but unless a union elects to be regulated exclusively under federal arbitration and conciliation the branch in New South Wales retains its registration under the Trade Union Act.

Statistics relating to the trade unions of employees in the State are shown in the following statement for various years since 1911. The figures exclude certain unions registered under Federal law only:—

Year.	Unions of Employees	Members.			Receipts.	Expenditure.	Funds at end of Year.
		Males.	Females.	Total.			
					£	£	£
1911	179	145,784	4,743	150,527	157,202	146,767	112,404
1916	202	218,609	12,941	231,550	241,644	249,691	202,950
1921	197	234,898	23,965	258,863	363,067	345,854	194,360
1926	170	286,245	33,354	319,599	494,341	494,979	322,912
1927	170	306,380	38,689	345,069	487,723	454,190	357,588
1928	165	302,282	38,661	340,943	504,640	498,020	362,118
1929	172	287,573	40,025	327,598	633,918	631,517	372,728
1930	167	265,487	36,831	302,318	488,348	527,847	329,262
1931	175	240,605	39,223	279,828	346,840	351,548	318,856
1932	170	241,127	39,718	280,845	330,167	316,031	336,574
1933	171	239,048	40,584	279,632	293,430	283,542	334,737
1934	173	242,905	41,021	283,926	327,578	303,574	358,980
1935	176	256,369	44,649	301,018	343,851	319,625	382,319
1936	177	253,621	47,486	301,107	371,243	345,428	401,837

At the end of the year 1936 there were 177 registered trade unions of employees. The membership, especially amongst women, increased rapidly between 1911 and 1921 as a result of organisation for the purposes of industrial arbitration and conciliation. The expansion continued until 1927, then the total membership commenced to decline owing to a diminution in employment. There has been an increase in each of the last three years.

The average membership per union, excluding the labour council and eight-hour committees, is 1,800; but the majority of the unions are small. In 1935 there were 24 with less than 100 members; 75 with 100 to 1,000 members; 50 with 1,000 to 5,000 members; 14 with 5,000 to 10,000; and 4 unions had more than 10,000 members.

The receipts during 1935 amounted to £343,851, including contributions, £321,136. Of the total expenditure, payments in respect of benefits amounted to £60,387, and management and other expenses, including legal charges in connection with industrial awards, etc., to £259,238. The total receipts and expenditure are liable to fluctuate under the influence of prevailing industrial conditions, the amounts being inflated in some years by the inclusion of donations for relief from one union to another. The funds include cash and freehold property and assets such as shares in Trades Halls and newspapers.

The following statement shows the membership, receipts, expenditure, and accumulated funds of trade unions of employees, according to industrial classification, in the year 1935:—

Industrial Classification.	Membership at end of year.			Receipts.	Expendi- ture.	Funds at end of year.	Funds per member.
	Males.	Females	Total.				
	No.	No.	No.	£	£	£	s. d.
Engineering and Metal Working ... ..	37,962	133	38,095	64,271	52,264	72,161	37 11
Food, Drink, and Narcotics ...	24,190	8,438	32,628	29,188	28,509	14,412	8 10
Clothing ... ..	5,385	16,552	21,937	9,130	8,477	14,280	13 0
Printing, Bookbinding, etc....	5,845	1,576	7,421	16,882	14,084	41,329	111 5
Manufacturing, n.e.i. ...	16,765	1,965	18,730	17,000	14,954	20,313	21 8
Building ... ..	27,264	2	27,266	13,187	12,199	15,386	11 3
Mining and Smelting ... ..	15,042	...	15,042	50,737	50,041	49,536	65 10
Railways and Tramways ...	40,726	700	41,426	39,488	41,002	23,356	11 3
Other Land Transport ...	5,005	...	5,005	3,427	3,665	3,572	14 3
Shipping and Sea Transport ...	9,931	12	9,943	17,494	18,389	9,868	19 10
Pastoral, etc. ... ..	8,289	674	8,963	11,615	11,382	1,318	2 11
Governmental, n.e.i. ... ..	25,832	4,510	30,342	35,328	32,874	63,649	41 11
Miscellaneous Industries ...	34,133	10,087	44,220	34,091	29,915	45,028	20 4
Labour Council and Eight-hour Committees ... ..	...	...	...	2,013	1,870	8,111	...
Total Unions of Employees...	256,369	44,649	301,018	343,851	319,625	382,319	25 4

A comparison of the membership of the various groups of unions with corresponding information for the year 1927—when membership was at a maximum—indicates that the decline was greatest in the group classified as “pastoral, etc.,” in which the number of members decreased from 36,800 in 1927 to 7,546 in 1933, with an increase to 8,963 in 1935. This group included, in addition to rural workers, men employed in connection with the construction of railways, water conservation works, and other public projects, and the shrinkage in membership was due to a large extent to cessation of public expenditure on works of this nature.

There was an almost general decline in membership in the mining and smelting group from 20,177 in 1927 to 13,825 in 1933 with an increase to 15,042 in 1935. In the engineering group the numbers in these years were 43,798, 35,119 and 38,095 respectively. In the building group members numbered 31,427 in 1927, and 21,955 in 1934, then increased to 27,266 in 1935.

The membership of unions concerned with the manufacture and distribution of food, etc., consisted of 24,360 men and 12,462 women in 1927, and the subsequent decrease occurred in the membership of unions relating

to the liquor trades and catering. The number of men increased from 20,954 in 1933 to 24,190 in 1935. The decline in the number of women in these unions continued until 1934 when they numbered only 7,670.

There has been a marked increase in the membership of unions of clothing and textile workers, in which a large proportion of the women unionists are organised, the numbers in 1927 and 1935 being males 2,636 and 2,986, and females 7,140 and 15,454 respectively. In the boot trades, membership declined from 5,609 in 1927 to 3,497 in 1935.

In the printing industry there was an increase in male membership and a decline in the number of women. In the rubber workers union in the miscellaneous group, the membership increased from 1,612 to 3,488 between 1927 and 1935.

In the railway and tramway unions membership has declined, but was slightly higher in 1935 than in the preceding year. In the shipping group there has been a decline which was greater in respect of waterside workers than in unions of seafaring employees.

In unions of governmental employees there was a falling off in regard to local government, water and sewerage services and teachers, and an increase in the police.

#### *Unions of Employers.*

Few unions of employers seek registration under the Trade Union Act, so that the available information concerning them is scanty and does not afford any indication of the extent of organisation amongst employers.

The unions of employers registered under the Trade Union Act in 1935 numbered 17. The membership at the end of the year was 10,267, and the funds amounted to \$64,553. The receipts during 1935 amounted to £42,440, and the expenditure to £32,051. The members included 7,719 in the pastoral industry.

Any employer or group of employers with at least 50 employees may register as an industrial union under the Industrial Arbitration Act.

## INDUSTRIAL ARBITRATION

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The term "Industrial Arbitration" is used here in a broad sense to embrace all provision made by legislation for the adjustment of industrial relations between employers and employees, by arbitration, by conciliation, or by co-operation of employers and employees.

In New South Wales there are two systems of industrial arbitration: one under State law, its operation being confined to the area of the State; and the Commonwealth system, which applies to industrial disputes extending beyond the limits of one State.

A brief account of the development of the State system was published in the Year Book for 1925-26. The federal system of industrial arbitration was inaugurated in 1904. Provision is made under both State and federal systems for collective bargaining and the registration and enforcement of industrial agreements.

The industrial conditions of employment in the public service of the Commonwealth are determined by an arbitrator appointed in terms of the Arbitration (Public Service) Act, 1920-1929.

### *Relation between State and Commonwealth Systems.*

The relation between the State and Commonwealth systems in respect of industrial awards and orders rests upon the provision of the Commonwealth Constitution Act that if a State law is inconsistent with a federal law, the latter prevails and the former becomes inoperative so far as it is inconsistent. The industrial authorities have adopted generally the same broad principles for the promotion of industrial peace and the maintenance of standard conditions. Nevertheless fundamental differences in legislation and in the extent of their constitutional authority have prevented them from co-ordinating their methods and practices and from blending their determinations into an industrial code for the guidance of employees and employers in all branches of industry throughout the Commonwealth. Thus differences have arisen in regard to wage determinations, hours and other industrial matters prescribed by State and Federal awards. An important difference lies in the scope of the industrial jurisdictions—State and Federal. The latter is operative only in cases of interstate disputes—actual or impending, and the scope of its decisions also is limited so that the Commonwealth Court cannot make its award a common rule of the industry concerned. The State tribunals, on the other hand, exercise the authority bestowed on them by the Parliament of New South Wales, over all engaged in the industries under their supervision, though the Federal award is paramount in case of conflict.

It is prescribed in the Commonwealth law that a federal tribunal may order a State industrial authority to cease dealing with any matter covered by a federal award, or the subject of proceedings before a federal tribunal, and State laws, awards, etc., are declared to be invalid insofar as they are inconsistent with, or deal with any matter dealt with in, a federal award, etc. Judges of the Commonwealth Court may confer with State industrial authorities in relation to any industrial matter with a view to securing co-ordination between awards and orders of the federal and State authorities.

## STATE SYSTEM OF INDUSTRIAL ARBITRATION.

*Industrial Unions.*

For the purpose of bringing an industry under the review of the State industrial tribunals, the employees must be organised as a trade union under the Trade Union Act, and must obtain registration as an industrial union under the Industrial Arbitration Act. Registration for the purpose has been effected by practically all classes of employees throughout the State, but employees in rural industries were removed from the operation of the State industrial system in December, 1929.

Registration as a union of employers may be granted to persons or groups of persons who have employed, on a monthly average, not less than fifty employees during the period of six months next preceding the date of application for registration. Prior registration under the Trade Union Act is not prescribed as in the case of unions of employees.

The Industrial Commission may cancel registration at its discretion, or upon the request of the union (unless an award or agreement relating to its members is in force), or if the union is accessory to an illegal lockout or strike.

At 30th April, 1937, there were 178 unions of employers and 155 unions of employees on the register.

*State Industrial Tribunals.*

The principal tribunal is the Industrial Commission, first constituted in 1926 in terms of the Industrial Arbitration (Amendment) Act, 1926, to replace the Court of Industrial Arbitration. Subsidiary tribunals are the Conciliation Commissioner and conciliation committees.

The Industrial Commission is constituted as a superior court of record, by a president and three others members, all having the same status as puisne judges of the Supreme Court. At sittings of the Commission three members must be present as arranged by the President, though in a particular matter it may delegate its powers to one member, his decision being subject to appeal to the full Commission. An additional member of the Commission may be appointed temporarily if required to expedite its work.

The Industrial Commission is authorised to determine industrial matters referred by the Minister, or arising from the operations of the conciliation committees; to hear appeals; and to summon conferences with a view to the settlement of industrial matters.

The duty of fixing standard hours for industries within its jurisdiction is also a function of the industrial Commission. Prior to September, 1937, it fixed living wages for men and women to be used as a basis of awards as to wages, but by an amending law, the basic rates determined by the Commonwealth industrial authority are to be used for this purpose under the direction of the Commission.

Each conciliation committee consists of the Conciliation Commissioner as chairman and an equal number of representatives of employers and employees who must be persons engaged in or acquainted with the working of the industry or calling concerned. A committee may be appointed for any industry or calling upon the recommendation of the Industrial Commission. The Conciliation Commissioner is appointed by the Governor for a term of seven years, and additional Conciliation Commissioners may be appointed for a specified period up to twelve months.

When exercising the powers of a chairman of a conciliation committee the Conciliation Commissioner endeavours to bring the parties to an agreement with respect to matters brought before the committee. He may sit with or without the members of the committee, and they sit as assessors only and without vote. If agreement is reached it is drawn up in the form of an award and upon compliance with certain requirements of the law it operates as an award. Where agreement is not arrived at the matter is referred to the Industrial Commissioner, and appeal from the decisions of the Conciliation Committee lies to the Industrial Commission. Where an industrial dispute or dislocation is threatened or has occurred, the Conciliation Commissioner may summon the parties to a compulsory conference in an endeavor to effect a settlement.

At 31st December, 1936, there were 295 conciliation committees.

The industrial tribunals may make awards fixing minimum rates of wages and salaries up to a maximum of £15 per week or £750 per annum, minimum prices for piece-work, overtime rates, number of apprentices, and hours and times to be worked to entitle employees to the wages fixed. Awards may prescribe that preference of employment be given to unionists, under conditions described on page 800.

An Apprenticeship Commissioner appointed in terms of the Industrial Arbitration Act and the members of the conciliation committee for an industry constitute the apprenticeship council for the industry, with power to regulate wages, hours, and other conditions of apprenticeship.

The Industrial Registrar—a public servant appointed by the Governor—conducts inquiries at the direction of the Industrial Commission regarding cases before the Act, registers the industrial unions, grants permits to aged, infirm or slow workers to work for less than the minimum wages prescribed by award or agreement, adjusts the rates of wages in current awards or agreements when the living wages are varied and discharges other duties as prescribed by the Act or regulations.

Proceedings before an industrial tribunal are initiated usually upon the application of employers of not less than twenty employees in any industry or calling, or by an industrial union of employees. Matters may be referred also by the Minister for Labour and Industry, and where the public interests are likely to be affected the Crown may intervene in any proceedings before a tribunal or may appeal from an award.

Awards are binding on all persons engaged in the industries or callings, and within the locality covered, for a period not exceeding three years specified therein, and after such period until varied or rescinded.

#### *Industrial Agreements.*

Industrial unions and trade unions are empowered to make with employers written agreements, which when filed in the prescribed manner become binding between the parties and on all the members of the union concerned.

The maximum term for which an agreement may be made is five years, but it continues in force after the expiration of the specified term until varied or rescinded, or terminated, after notice by a party thereto. An industrial agreement may not provide for wages (except for apprentices or trainee apprentices) lower than the living wages declared by the Commission, and upon any variation of the living wages the rates of pay in an agreement may be adjusted accordingly by the Industrial Registrar upon application by any party to the agreement.

*Number of Industrial Awards and Agreements.*

The number of awards and agreements made by the State industrial tribunals during each of the last five years is shown below:—

Year.	Awards Published.		Agreements Filed.		In Force at end of Year.	
	Principal.	Subsidiary.	Principal.	Variations.	Awards.	Agreements
1932 ... ..	38	695	25	3	490	140
1933 ... ..	30	557	24	1	490	148
1934 ... ..	55	1,049	22	...	519	151
1935 ... ..	44	1,455	31	1	484	159
1936 ... ..	52	816	39	1	480	170

The subsidiary awards include a large number made by the Industrial Registrar in consequence of variations in the living wages which were subject to review by the Industrial Commission every six months.

Complaints regarding breaches of award and industrial agreements are investigated by officers of the Labour and Industry Department, who may direct prosecutions. Proceedings may be taken also by employers and by the secretaries of industrial unions, and the cases are dealt with by the Industrial Registrar or the industrial magistrates.

## THE COMMONWEALTH SYSTEM OF INDUSTRIAL ARBITRATION.

The chief tribunal is the Court of Conciliation and Arbitration, consisting of a Chief Judge and other judges appointed by the Governor-General, with life tenure. Each judge is charged with the duty of endeavouring to reconcile the parties in industrial disputes, and for the purpose he may convene compulsory conferences. There are also conciliation commissioners, not more than three in number, appointed by the Governor-General for a term of five years, with authority to intervene in industrial disputes and to summon conferences.

In the Commonwealth system of industrial arbitration provision is made for both conciliation and arbitration. Registration is a necessary qualification to entitle unions to submit disputes to the Court, or to be represented in proceedings relating to disputes, and industrial organisations of employers and of employees, representing at least 100 employees, may be registered on compliance with prescribed conditions.

The Court or the conciliation commissioners endeavour to induce the settlement of disputes by amicable agreement, or, failing an agreement, may determine the disputes by award. Industrial agreements, when certified by a judge of the Court or a conciliation commissioner and filed in the office of the Registrar, are binding on the parties thereto. The awards and agreements are made for a specified period up to a maximum of five years, and after the expiration of the definite period an award continues until a new award is made, unless the Court or conciliation commissioner orders otherwise. Agreements continue unless rescinded, or terminated by notice.

The powers conferred upon the Court include the power to determine rates of wages, hours, and other conditions of employment, and to grant preference to members of organisations. Similar authority may be exercised by a conciliation commissioner in so far as it may be exercised by a single judge.

Awards or interpretations or variations thereof which would result in the alteration of standard hours or of the basic wage or the principles on which it is computed are determined by the Chief Judge and not less than two other judges. In such cases the Attorney-General, by public notification, may authorise any person, union, or organisation interested in the matter to apply to the Court for liberty to be heard and to examine and cross-examine witnesses.

The industries subject to federal awards and agreements include coal-mining, shipping, pastoral industries, shipbuilding, timber trades, clothing factories, breweries, glass works, and rubber works, and large sections of the metal and printing trades and of the railway and tramway employees.

At 31st December, 1935, there were 111 awards of the Commonwealth Court in force in New South Wales, also 39 agreements filed under the provisions of the Commonwealth Act.

#### CROWN EMPLOYEES AND ARBITRATION.

Under the State Arbitration system, employees of the State Government and of governmental agencies, with the exception of the police, have access to the ordinary industrial tribunals for the settlement of disputes and the regulation of the conditions of their employment.

The police are excluded from the jurisdiction of the industrial tribunals and are controlled by the Commissioner of Police. An appeal tribunal has been constituted to determine appeals against his decisions in regard to promotions and punishments. The tribunal is constituted by a Judge of the District Court, with or without assessors.

The rates of pay and terms and conditions of employment in the public services of the Commonwealth are regulated by a special tribunal constituted by an arbitrator appointed by the Governor-General to deal exclusively with the public service. There is no appeal against the decisions of the arbitrator, but they do not come into operation until they have been laid before both Houses of the Commonwealth Parliament, and they may be disallowed by a resolution of either House.

It has been decided by the High Court of Australia that in certain cases the Commonwealth Court of Conciliation and Arbitration may make awards in respect of State employees, and it has been the practice of the Court to make an award in such cases unless the rates paid and the conditions of work conform with the usual rates and conditions laid down by the Court.

In 1930 the salaries of Crown employees in the State and federal services became subject to special reductions prescribed by the Legislature for purposes of economy, as well as to reductions resulting from decreases in the living or basic wages. The special deductions, as described in previous issues of the Year Book, were restored gradually between 1933 and 1936-37, complete restoration being effective in September, 1936, in the federal services, and in July, 1937, in the State services.

#### HOURS OF WORK.

Apart from the regulation of working time by industrial awards and agreements, hours of work in New South Wales are restricted in a general way by legislation in order to safeguard the health of the workers, especially women and juveniles. The Factories and Shops Act prohibits the employment in factories or shops of youths under 16 and of women for more than

44 hours in any week, though overtime not exceeding 3 hours in any day is allowed on 24 days in a year, or by written permission of the Minister, where necessary to meet the exigencies of trade, on 48 days.

Hours of employment in shops are regulated in terms of the Factories and Shops (Amendment) Act, 1936, which prescribes that the closing times of shops in shopping districts are to be the hours fixed by the industrial awards and agreements for the cessation of work by the employees. The closing hours current at the date of this Act, however, remain unchanged until varied by award.

Except in the case of specified shops, only one late shopping night is allowed, when the closing hour must not be later than 10 o'clock. On four days a week the shops must close at 6 o'clock, and on one day at 1 o'clock. In the Metropolitan and Newcastle districts, and in the country shopping districts in the county of Northumberland, the shops are subject to the Saturday Half-holiday Act; the late closing night is on Friday, and the 1 o'clock closing on Saturday. In other districts the half-holiday is either on Wednesday with the late night on Saturday, or on Saturday with the late night on Friday.

With the development of the arbitration system the actual working hours in organised trades and callings became subject to awards and agreements, and special legislation has been enacted for the direction of the industrial tribunals in making awards and agreements under the State jurisdiction. Thus the Eight Hours Act of 1916 prescribed a standard working week of 48 hours. In 1920 the Act was amended and, on the recommendation of a special court, the 44-hours week was proclaimed in many industries.

In September, 1922, the amending Act of 1920 was repealed and the Court of Industrial Arbitration restored the 48-hour week in most of the cases in which the working time had been reduced. The 44-hours week became the standard again (except in the rural industries) as from 4th January, 1926, and has remained in operation, except in the latter half of the year 1930, when the hours were 45 per week.

At the end of the year 1932 the Industrial Commission was charged with the duty of determining, after public inquiry, the standard hours for industries within its jurisdiction. The Commission announced, after its first inquiry in June, 1933, that it had decided to declare 44 hours per week as the standard applicable to industry generally, and to apply the standard with a degree of elasticity—as under former statutes—in order to meet the varying needs of different industries.

It is a general provision of the law that rates of wages prescribed by award or agreement are to be adjusted when standard hours are varied so that an employee working full time will receive the same amount of wages as for working full time prior to the variation. Nevertheless, after a declaration has been made and the rates of wages adjusted, the Industrial Commission may reduce the working hours in any industry and provide for a proportionate reduction in wages.

Overtime may be permitted under certain conditions or it may be prohibited or restricted for the purpose of relieving unemployment by distributing the work available.

Notwithstanding the provision of awards or agreements, work may be shared or rationed amongst employees of the Crown, *i.e.*, the Government departments and statutory bodies, but the application of the system in other employment is liable to be restricted in terms of awards, etc.

The hours of work in the coal-mines are eight hours bank to bank, inclusive of one half-hour for meal time, on Monday to Friday, and six hours bank to bank, inclusive of one half-hour for meal time, on Saturday, Sunday, and holidays, the usual number of shifts being eleven per fortnight.

The hours are reckoned from the time the first person working on a shift leaves the surface to the time the last man on the same shift returns to the surface.

The following statement compiled by the Commonwealth Statistician for each State of the Commonwealth shows the average number of hours in a full working week (without overtime) for adult male workers in industrial occupations, except shipping and rural industries:—

End of Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
1914 (April) ... ..	49·42	48·80	48·78	48·60	47·78	48·62	48·93
1916 ... ..	48·51	48·22	48·27	48·14	48·11	48·55	48·33
1921 ... ..	45·66	46·95	45·52	47·07	46·24	46·84	46·22
1926 ... ..	44·55	46·94	43·95	46·95	45·80	47·27	45·57
1929 ... ..	44·14	46·83	43·96	46·83	45·58	47·09	45·34
1930 ... ..	45·64	46·85	44·43	46·83	45·55	47·00	45·98
1931 ... ..	44·22	46·88	44·98	46·83	45·55	46·76	45·51
1932 ... ..	44·19	46·86	44·99	46·83	45·51	46·75	45·49
1933 ... ..	44·23	46·82	44·00	46·83	45·51	46·77	45·36
1934 ... ..	44·23	46·82	44·00	46·83	45·51	46·77	45·36
1935 ... ..	44·18	46·74	43·69	46·63	45·48	46·75	45·26
1936 ... ..	44·08	46·41	43·69	46·55	45·30	46·33	45·09

Between April, 1914, and December, 1929, the average nominal working week for adult males in New South Wales was reduced by 5½ hours to 44·1 hours per week. Then an amendment of the State law, as quoted above, caused a temporary increase of 1½ hours. The average has since declined below the former level.

#### *Public Holidays.*

Certain days are observed as public holidays, on which work is suspended as far as practicable. In continuous processes and in transport and other services where the employees work on holidays they receive recreation leave in lieu thereof, and in some cases extra wages.

The days which are observed generally throughout the State as public holidays are as follows:—1st January (New Year's Day), 26th January (the Anniversary of the first settlement in Australia), Good Friday, Easter Monday, 25th April (Anzac Day), Christmas Day, 26th December (Boxing Day), and the King's Birthday.

If a public holiday falls upon a Sunday, or if Boxing Day falls upon a Monday, the following day is a holiday. If the King's Birthday falls upon any day of the week other than Monday the following Monday is a holiday in lieu thereof. Anniversary Day was observed on the Monday following its date in the years 1935 to 1937.

In addition to the days listed above, the day after Good Friday and the first Monday in August are bank holidays, observed in respect of banks and many other financial institutions and public offices. The Governor may appoint by proclamation a special day to be observed as a public holiday throughout the State or any part of the State. It is customary in certain districts to proclaim a day in each year as Eight Hour Day. In the county of Cumberland the first Monday in October is Eight Hour Day.

#### PREFERENCE TO UNIONISTS.

The laws relating to industrial arbitration confer upon both State and Federal industrial tribunals the authority to embody the principle of preference to unionists in their awards, etc., but this may not operate to prevent the employment of returned soldiers or sailors.

The State industrial tribunals may prescribe by award that as between members of a union specified in the award and other persons offering or desiring employment at the same time preference of employment be given to members of a union, other things being equal. It is a general rule to grant preference to a union which substantially represents the trade concerned.

The Commonwealth Court is authorised to grant preference to members of registered organisations, but in the exercise of the authority the Court adheres to the general principle that only in case of strong necessity should there be any interference with the employer's discretion in choosing his employees. Consequently it has been the usual practice to refuse to order preference if the respondents undertake not to discriminate against unionists. In 1932, however, preference was awarded in respect of women and girls in clothing factories with the object of preventing the exploitation of labour of this class.

#### APPRENTICESHIP.

Conditions of apprenticeship in New South Wales are subject to general regulation in terms of the Apprentices Act of 1901, which prescribes that children may not be indentured until they reach the age of 14 years, the maximum term of apprenticeship being seven years. The hours of work may not exceed 48 per week, except in farming occupations and in domestic service.

The Industrial Arbitration Act of New South Wales confers upon the industrial tribunals authority to attach certain conditions to the employment of apprentices, the term being defined to include all employees serving a period of training under indenture or other written contract for the purpose of rendering them fit to be qualified workers in an industry. In recent years authority under the Act has been exercised by an Apprenticeship Commissioner appointed for a term of seven years. The Commissioner, with the members of the conciliation committee for each industry, constitutes the apprenticeship council for the industry. The Commissioner is chairman and the other members sit as assessors only and without a vote. The councils may determine matters in dispute in regard to apprenticeship in the respective industries and decisions operate as awards. Appeal from the councils' decisions lies to the Industrial Commission, and the members of the council concerned, other than the Apprenticeship Commissioner, sit as assessors.

Contracts of apprenticeship must be registered within a month of execution, and apprentices (or trainee apprentices) may not be employed without the consent of the apprenticeship council. The normal period of apprenticeship is usually five years in the case of boys entering the trade before reaching the age of 17 years. Shorter periods are arranged for those entering at older ages, and such apprentices are required usually to attend trade or continuation schools, and, in some cases, to pass through courses of intensive training. In several occupations adult apprenticeship may be allowed under special contract.

To obviate difficulties which arise from the intermittent employment of those qualified to undertake the training of apprentices, apprentices may be transferred from one master to another, and organisations of employers and operatives, by official representatives, may be masters of apprentices. In some occupations the proportion of apprentices to journeymen is fixed. The rates of wages are prescribed for the apprentices in each trade. The hours and other conditions of employment are determined by the apprenticeship councils relating to the industry.

The number of indentures of apprenticeship registered during the year 1929 was 1,448. In the following year the number was 1,005 and it dwindled to 543 in 1931 and 404 in 1932. This rapid falling off was due to the unwillingness of employers to bind themselves for a period of five years under adverse economic conditions, and in September, 1933, the Apprenticeship Commissioner decided to introduce a new system of apprenticeship without indentures, as supplementary to the existing system.

Under the new arrangements employers may apply to the apprenticeship councils for exemption from awards or regulations in so far as they prescribe a contract of apprenticeship. Employers who obtain exemption will be required to observe other conditions enjoined by the awards and agreements, such as those relating to the proportion of apprentices to journeymen and to compulsory technical training, and they must pay the trainees at rates 15 per cent. above the rates for indentured apprentices. During the three months October to December, 1933, 58 trainee employees were registered. The number was 373 in the year 1934, 621 in 1935 and 963 in 1936. The number of indentures of apprenticeship registered was 529 in 1933, 813 in 1934, 967 in 1935, and 1,263 in 1936.

The following statement shows the distribution of indentured apprentices amongst the various trades at the end of the years 1928, and 1931 to 1936:—

Trades.	Dec., 1928.	Dec., 1931.	Dec., 1932.	Dec., 1933.	Dec., 1934.	Dec., 1935.	Dec., 1936.
Baking ...	118	219	217	204	219	252	246
Boilermaking ...	293	170	104	42	24	28	58
Bootmaking ...	141	183	155	109	209	298	314
Building ...	1,791	1,227	807	435	207	264	466
Butchering ...	29	23	23	19	16	16	12
Coachmaking (Rail) ...	37	12	5	2	1	1	...
"    "    (Road)	325	108	65	29	17	25	41
Electrical ...	952	749	566	414	350	347	432
Engineering ...	1,398	576	351	313	280	317	484
Farriery ...	50	41	32	23	19	14	12
Furniture ...	875	430	308	202	119	141	201
Gas meter making ...	25	25	21	22	17	10	9
Glass-working ...	25	37	31	22	15	33	57
Hairdressing ...	169	124	85	84	111	156	270
Jewellery, Electroplating etc.	24	36	31	29	31	59	94
Metal Moulding ...	174	72	43	41	35	45	73
Pastrycooks ...	66	106	90	73	69	67	76
Printing ...	688	293	233	207	200	227	249
Sheet Metal-working and Tin-smithing.	38	22	17	7	5	8	8
Ship and Boat building	43	22	15	16	20	19	27
Other ...	71	98	81	71	82	96	115
Total ...	7,332	4,573	3,280	2,364	2,046	2,423	3,244

The foregoing figures do not include indentures of apprenticeship which are not required by award or regulation to be filed with the State Industrial Registrar. The trainee apprenticeship system was introduced in October, 1933.

The number of trainee apprentices registered in each trade up to December, 1936, was:—Building, 442; boilermaking, 72; coachmaking (rail) 22, (road) 41; electrical, 223; electroplating, 27; engineering, 926; gas meter making, 32; moulding, 171; and sheet metal working, 58.

The number of apprenticed wage-earners recorded at the census taken in June, 1933, was 10,371, of whom 8,393 were males and 1,978 were females.

## INDUSTRIAL DISLOCATIONS CONTINGENT UPON DISPUTES.

Under the State law strikes may be recognised as lawful if fourteen days' notice of the intention to strike has been given to the Minister for Labour and Industry, except strikes by employees of the Government or of municipal and shire councils, or by workers engaged in military or naval contracts. Strikes are illegal also in industries in which conditions of employment are regulated by award or agreement, unless the award has been in operation for at least twelve months and the union has decided by a secret ballot to withdraw from its conditions.

When a strike is contemplated, or at any time during a strike, the Minister may direct that a secret ballot be taken in order to ascertain whether the majority of the unionists concerned is or is not in favour of the strike.

The Industrial Commission may cancel the registration of a union and any award or agreement relating thereto if the union is inciting or aiding any other union or its members in a lock-out or an illegal strike.

The maximum penalty for an illegal strike is £500 in the case of a union, and £50, or six months' imprisonment, in regard to an individual. Penalties may be imposed also for obstructing a ballot, for picketing in connection with an illegal strike, or for inducing persons to refrain from handling any commodity during a strike.

A penalty up to £1,000 may be imposed if any person or union of employers take part in a lockout, unless the employees in the industry concerned are taking part in an illegal strike.

Provisions of the Commonwealth Conciliation and Arbitration Act by which lockouts and strikes were prohibited under severe penalty were repealed in August, 1930. Lockouts and strikes may be prohibited, however, by the terms of an award and the insertion of a clause to this effect renders the parties liable to penalty for breach of the award if they take part in a lockout or strike. The maximum penalty is £100 in the case of an organisation, and £10 in the case of an individual.

*Particulars of Dislocations.*

Records relating to industrial dislocations contingent upon disputes in all classes of industry in New South Wales are kept by the Department of Labour and Industry. In the compilation of statistical tables relating thereto, it is the rule of the Department in counting the number of dislocations to consider that the cessation of work contingent upon any one dispute constitutes only one dislocation. For example, if a section of employees in an industry ceases work and the dispute extends subsequently to other employees in that industry in the same or in other localities, one dislocation is recorded. On the other hand, if employees in other industries cease work in sympathy with the militant unions, the sympathy strikes are counted as another dislocation, that is, one in addition to the original dislocation.

In the coal-mining industry, when the action of one section of the employees has caused a complete cessation of the operations of the mine, the number counted is the full complement of the mine. Where a section has ceased work and the operations of the mine have continued, only those who ceased work have been included as workers involved.

In calculating the duration, only actual working days, viz., days on which work would be performed ordinarily, have been counted, but apparently no allowance has been made for intermittency of employment, and it has been assumed that if the dispute had not occurred work would have been continuous during the period of its currency. Consequently the figures are inflated, particularly in the mining industry, where there is considerable intermittency due to causes other than disputes.

The following statement shows, so far as can be ascertained, the number of workers involved, and, subject to the remarks above with respect to intermittency, the time lost by industrial dislocations contingent upon disputes in each year since 1927. Particulars are shown separately regarding dislocations which originated during the year specified, and those which commenced at an earlier date:—

Year.	Dislocations.			Workers Involved.			Duration—Working Days.		
	Anterior.	New.	Total	Anterior.	New.	Total.	Anterior.	New.	Total.
1927	3	457	460	650	178,920	179,570	58,250	841,702	899,952
1928	6	276	282	904	100,937	101,841	29,236	470,546	499,782
1929	2	330	332	567	100,676	101,243	4,303	3,209,761	3,214,064
1930	6	185	191	11,136	52,045	63,181	1,210,266	339,783	1,550,049
1931	5	99	104	1,352	26,772	28,124	211,380	103,661	315,041
1932	2	122	124	622	45,183	45,805	159,522	92,743	252,265
1933	1	92	93	100	23,409	23,509	300	59,002	59,302
1934	1	171	172	80	50,780	50,860	720	211,406	212,126
1935	3	224	227	568	54,766	55,334	8,122	262,853	270,975
1936	3	281	284	1,935	84,407	86,342	84,803	383,514	468,317

The loss in working days during 1933 was the smallest in any year of the period—1914 to 1933—for which complete records are available. According to departmental records, the loss in 1931 includes 158,900 days, and in 1932 159,522 days, in respect of two anterior disputes in metalliferous mines, where work was not resumed owing to adverse trade conditions.

A classification of the dislocations according to mining and non-mining industries reveals the fact that disputes leading to a suspension of work occur more frequently and are more extensive in the mining industry than in any other. Moreover, the time lost in coal-mining, as a general rule, exceeds the aggregate loss in other industries. In calculating the duration of the dislocations, however, allowance is not made for intermittency, and it is probable that the over-statement arising from this factor is far greater in coal-mining than in other occupations, especially in recent years, when the demand for coal has been below normal. For instance, in 1928 the loss of working time in coal-mines attributed to industrial disputes was 369,778 days, and the loss arising from slackness of trade and other causes was 2,337,500 days. In 1929 the principal collieries in the northern district were closed in March owing to a dispute, and were still idle at the end of the year. As a result the loss of working days attributed to industrial strife in coal-mining in 1929 increased to 2,476,536 days, while the loss due to other causes (which are inoperative during a dispute dislocation) declined to 751,865 days.

In analysing statistics of industrial disputes, especially if they are being compared with those of other countries, careful consideration should be given to the method of computation and the definition of terms, as shown on the preceding page, because the practices vary greatly in the different countries in which such data are published.

The following statement shows the particulars of the dislocations in mining and in other industries which commenced in each of the last ten years. The working days during each dislocation have been assigned to the

year in which the dislocation commenced, and for this reason the figures differ from those in the previous table, which show the working days classified according to the year specified.

Year.	Dislocations.			Workers Involved.			Duration—Working Days.		
	Mining.	Non-mining.	Total.	Mining.	Non-mining.	Total.	Mining.	Non-mining.	Total.
1927	366	91	457	153,095	25,825	178,920	710,731	160,207	870,938
1928	231	45	276	93,438	7,499	100,937	346,123	128,726	474,849
1929	300	30	330	94,692	5,984	100,676	3,689,891	746,486	4,436,377
1930	158	27	185	44,453	7,592	52,045	617,538	76,797	694,335
1931	81	18	99	25,116	1,656	26,772	95,932	7,729	103,661
1932	97	25	122	41,172	4,011	45,183	84,064	8,979	93,043
1933	72	20	92	18,133	5,276	23,409	44,157	15,565	59,722
1934	133	38	171	38,888	11,892	50,780	135,763	83,765	219,528
1935	192	32	224	46,851	7,915	54,766	164,169	183,487	347,656
1936	254	27	281	79,163	5,244	84,407	219,574	165,020	384,594

The loss in the mining industry attributed to disputes which commenced in 1929 included 3,463,922 working days—2,300,772 in 1929 and 1,163,150 in 1930—on account of the closing of the northern collieries from 1st March, 1929, to 3rd June, 1930.

A serious dispute occurred, also, in the timber industry in 1929, following an extension of hours by award of the Commonwealth Court of Conciliation and Arbitration. The dislocation lasted from January to October.

It is difficult to obtain reliable information regarding the cost of industrial dislocations. An estimate of the losses in wages in each of the ten years is shown below, the method adopted being as follows:—The working days lost were classified into the fourteen industrial groups, for which average rates of wages are shown subsequently in this chapter, the days being assigned to the year in which the dislocation commenced; the days lost in respect of each group in each year were then multiplied by the rate of wages which is the mean of the average rate for adult males in that group as at the end of that year and at the end of the previous year.

Year.	Duration—Working Days.			Estimated Loss of Wages.		
	Mining.	Non-mining.	All Industries.	Mining.	Non-mining.	All Industries.
	Days	Days.	Days.	£	£	£
1927	710,731	160,207	870,938	680,400	136,900	797,300
1928	346,123	128,726	474,849	323,000	109,700	432,700
1929	3,689,891	746,486	4,436,377	3,451,500	668,500	4,120,000
1930	617,538	76,797	694,335	569,900	63,600	633,500
1931	95,932	7,729	103,661	86,100	6,000	92,100
1932	84,064	8,979	93,043	73,400	6,700	80,100
1933	44,157	15,565	59,722	37,900	4,000	41,900
1934	135,763	83,765	219,528	116,500	55,500	172,000
1935	164,169	183,487	347,656	141,000	131,000	272,000
1936	219,574	165,020	384,594	188,800	120,000	308,800

Apart from the matter of intermittency which is discussed on the previous page, these quotations of estimated loss of wages are open to question in so far as the records are deficient in regard to the sex and age of the workers involved, therefore allowance has not been made for the proportion of women and juveniles. The proportion is small, however, as dislocations

have been relatively unimportant in industries in which the majority of the women and juvenile workers are employed. Another factor for which allowance has not been made is the extent to which losses in wages during a dislocation may have been compensated by higher rates of pay after resumption of work.

Information is given in the following table regarding the duration of the dislocations which originated during the year 1936:—

Duration in Working Days.				Dislocations.	Workers Involved.	Duration—Work Days.
Under 1 day	...	...	...	6	1,336	660
One day	...	...	...	165	52,655	53,735
Over 1 and not exceeding 10	...	...	...	94	24,990	86,991
„ 10	„	„	50	13	1,938	32,764
„ 50	„	„	100	3	3,128	170,484
„ 100	„	„	300	1	360	39,960
Total				281	84,407	384,594

A very large proportion of the dislocations are of brief duration. The number of workers affected by dislocations lasting one day or less during 1936 was 53,991, with a loss of 54,395 working days.

The causes of the disputes which led to dislocations in the mining industries and in the non-mining group during 1936 are classified in the following statement. Dislocations arising from the employment of non-union labour are included in the category, “employment of persons, etc.” Those pertaining to the recognition of a union and the enforcement of union rules are classified under the head of “trade unionism.”

Cause.	Mining.			Non-Mining.			All Industries.		
	Dislocations.	Workers involved.	Duration—Working days.	Dislocations.	Workers involved.	Duration—Working days.	Dislocations.	Workers involved.	Duration—Working days.
Wages .. .. .	64	16,241	36,217	11	988	14,345	75	17,229	50,562
Hours .. .. .	11	2,205	4,426	2	2,763	145,998	13	4,968	150,424
Working conditions ..	67	18,974	78,580	1	21	3	68	18,995	78,583
Employment of persons or classes of persons ..	61	17,631	52,871	11	827	3,984	72	18,458	56,855
Trade unionism .. ..	5	1,094	2,030	..	..	..	5	1,094	2 080
Sympathy .. .. .	3	996	21,234	1	45	390	4	1,041	21,624
Miscellaneous .. ..	25	18,624	20,431	1	600	300	26	19,224	20,731
Not stated .. .. .	18	3,398	3,735	..	..	..	18	3,398	3,735
Total .. .. .	254	79,163	210,574	27	5,244	165,020	281	84,407	384,594

In the mining industries disagreements about the working conditions were the cause of 36 per cent. of the loss of working time during 1936, and disputes about the employment of persons or classes of persons and wages 25 per cent. and 17 per cent. respectively.

In non-mining industries 89 per cent. of the loss was the result of disputes about hours.

## INDUSTRIAL HYGIENE.

The trend of legislation, the organisation of public services for research and propaganda, and the development of private schemes for the promotion of industrial welfare show that widespread attention is being directed towards the reduction of the waste occasioned by preventable diseases and accidents arising in the course of industrial employment.

In both State and federal departments of public health a section has been created to deal with industrial hygiene. The work of these units embraces the investigation of occupational diseases, the supervision of health conditions in industry, and the dissemination of advice regarding measures which safeguard the health of the workers.

Legislation in regard to industrial hygiene is contained in a number of Acts which apply to various classes of industry. The Factories and Shops Act, 1912, and its amendments, impose upon occupiers of factories the obligation of providing suitable buildings and of keeping the premises clean, of securing adequate protection against fire, and of safeguarding dangerous machinery. The employment of women and juveniles and of outworkers is subject to limitations, and outworkers in the clothing trade must be licensed by the Industrial Registrar.

The provisions of the law in relation to the safety of employees were extended in 1936 and safety committees consisting of representatives of employers and employees may be established to report upon conditions of work and means adopted for the prevention of accidents.

Factories must be registered annually, and inspection, with the object of securing compliance with the law, is conducted by a staff of inspectors attached to the Department of Labour and Industry. In terms of an amending Act which commenced on 31st July, 1936, shops in proclaimed shopping districts must also be registered each year.

In match factories the use of white phosphorus is prohibited by the White Phosphorus Prohibition Act, 1915.

In terms of the Scaffolding and Lifts Act, 1912, the use of scaffolding, lifts, cranes, hoists, and derricks is subject to supervision in order to minimise the risk of accident. In the Metropolitan and Newcastle districts where the Act is operative regulations have been promulgated regarding the construction of scaffolding, lifts, etc., and lift attendants and crane-drivers must obtain certificates of competency, which are issued by the Department of Labour and Industry.

Under the Rural Workers Accommodation Act, 1926, employers are required to provide proper accommodation for rural workers who reside on the premises. The Act applies in proclaimed districts in respect of workers employed for a period exceeding twenty-four hours in agricultural, dairying, or pastoral occupations.

The conditions under which mining is conducted are subject to regulation in terms of Acts which are described in the chapter relating to the mining industry. The Navigation Acts—State and federal—prescribe conditions to be observed for safeguarding the health of seamen.

*Industrial Accidents.*

Under various enactments relating to industrial hygiene, employers are required to give notice to the statutory authority of accidents which cause injury to workers, but the available data do not supply a comprehensive record of such occurrences. In factories, employers are required to report accidents causing loss of life; accidents due to machinery or to hot liquid

or other hot substance, or to explosion, escape of gas or steam, or to electricity or to acid or alkaline solutions, if an employee is so disabled as to prevent him from returning to his work in the factory within forty-eight hours; and other accidents if an employee is disabled for seven days or more.

In the year 1936 there were 11 fatal accidents in factories and 7,520 non-fatal, including 101 which caused permanent injury. There were also 5 fatal and 23 non-fatal accidents in connection with lifts, scaffolding and cranes, in 1936. Particulars of accidents in mines and of railway and tramway accidents are shown in other chapters of this Year Book.

#### WORKERS' COMPENSATION.

Under State legislation provision has been made for the payment of compensation to workers who suffer injury in the course of their employment. The principal enactment is the Workers' Compensation Act, 1926-29, which commenced on 1st July, 1926. Special provision for workers who are disabled in this way is made under the Workmen's Compensation (Silicosis) Act, 1920-1926. This Act does not apply in respect of diseases caused by silica dust, and cases of disablement by pneumoconiosis, tuberculosis, and lead poisoning in the Broken Hill mines are compensated under the Workmen's Compensation (Broken Hill) Act, 1920-1929, and the Workmen's Compensation (Lead Poisoning—Broken Hill) Acts, 1922 and 1924.

Compensation to members of the police force, killed or disabled by injury in the execution of duty, is payable in terms of the Police Regulation (Superannuation) Act, which is described in the section of this Year Book relating to the police. The amount of compensation is determined by the Governor.

The laws of the Commonwealth provide for compensation to men in a particular class of work, such as that of seamen, which is subject to special risks, and to workers in the service of the Commonwealth Government.

Under the Workers' Compensation Act, 1926-29, compensation is payable to workers whose remuneration does not exceed £550 per annum.

A worker and, in the case of his death, his dependants are entitled to compensation if he receives personal injury or contracts a disease, arising out of and in the course of his employment, except a disease caused by silica dust, in respect of which special legislation has been enacted. The Act does not impose the obligation of compensation in respect of an injury unless it disables a worker for at least seven days.

Where death results from an injury persons wholly dependent on the worker's earnings are entitled to a sum equal to four years' earnings or £400, whichever is the larger, but not exceeding £800. The amount of any weekly payments or lump sum received by the worker is to be deducted from the amount payable, but may not reduce it below £200. In addition a sum of £25 is payable in respect of each child and step-child under 16 years who was wholly dependent on the worker's earnings.

Where there are no persons totally dependent, compensation, as determined by agreement or by the Workers' Compensation Commission, may be paid to persons partially dependent. Where there are no dependants reasonable burial expenses up to £30 are payable.

In cases of total or partial incapacity the compensation payable includes: (a) weekly payments, and (b) the cost of medical and hospital treatment and ambulance service.

The maximum weekly payment in respect of the worker is two-thirds of the average weekly earnings up to £3 a week. Where the weekly earnings of an adult worker are less than £3 he may be paid 100 per cent. up to £2 per week and a minor earning less than 45s. a week may receive as compensation 100 per cent. of his earnings up to 30s. a week. In addition, a worker is entitled to £1 a week in respect of his wife and 8s. 6d. per week in respect of each child and step child under 14 years totally or mainly dependent upon his earnings. Where no compensation is payable in respect of a wife, a worker may receive £1 a week in respect of one female dependant, who is an adult and is caring for a child of the worker under 14 years, or is a member of his family over 14 years. Where no compensation is payable in respect of children, a worker may receive 8s. 6d. a week in respect of each dependent brother and sister under 14 years. The total weekly payments to the worker and his dependants may not exceed his average weekly earnings, or £5 whichever is the smaller amount, and the total liability of the employer in respect of weekly payments may not exceed £1,000.

The employer's liability for ambulance service rendered to a worker is limited to two guineas unless the Commission allows a further sum on account of distance travelled. For medical treatment the maximum is £25 in respect of the same injury. For hospital treatment the maximum is £25, treatment as an out-patient being calculated at a rate of 3s. per treatment up to one guinea per week, and as an in-patient at a rate not exceeding three guineas per week.

With the consent of a worker, the liability for a weekly payment may be redeemed wholly or in part by the payment of a lump sum determined by the Commission, having regard to the worker's injury, age, occupation, and diminished ability to compete in an open labour market. By agreement or order of the Commission the lump sum may be invested or applied for the benefit of the person entitled thereto. The Act contains a list of amounts which, if the worker so elects, may be paid for specific injuries.

The Act prescribes that every employer must insure with a licensed insurer against his liability to pay compensation, unless he is authorised by the Workers' Compensation Commission to undertake the liability on his own account. Insurers transacting workers' compensation business must obtain a license from the Commission, and must deposit with the State Treasurer a sum of £6,000 or £10,000 according to premium income as a guarantee that compensation payments will be met when due. Self-insurers must deposit an amount determined by the Commission.

The Workers' Compensation Commission consists of a chairman, who must be a barrister-at-law of five years' standing and who has the same status as a District Court judge, and two other members appointed by the Governor. An additional member may be appointed as deputy-chairman. The Commission exercises judicial functions in regard to the determination of compensation claims, and its decisions are final. The Commission is required to furnish workers and employers with information as to their rights and liabilities under the Act, and to make reasonable efforts to conciliate the parties to any dispute which may arise. The Commission may appoint medical practitioners as referees, and may summon a medical referee to sit as an assessor, or may submit any matter to a medical referee or a board of medical referees for report.

Salaries and other expenses incurred by the Commission are payable from a fund constituted for the purpose by contributions from insurers, who are required to pay thereto a percentage, fixed by the Commission, of their total premiums in respect of workers' compensation insurance.

Facilities to enable employers to insure have been provided by the State Insurance Office as well as by private insurers.

Returns supplied to the Commission by insurers indicate that 27,064 claims for compensation under the Workers' Compensation Act, 1926-29, were admitted during the year ended 30th June, 1932, and that the approximate number of workers entitled to compensation in the subsequent years was 43,829, 45,989, 52,560, and 66,808 respectively. These numbers fall short of the actual number of injuries sustained by workers in the course of their employment. In the first place, certain groups of employees are outside the scope of the Workers' Compensation Act, such as casual workers (unless employed for purposes of the employer's trade or business) outworkers, employees whose remuneration exceeds £550 per annum, and the police and others for whom special provision is made under other Acts. There are also groups of employees who are paid full wages in cases of illness or accident, and, as a general rule, claims for compensation are not made in respect thereof unless they result in death or serious disability.

From particulars recorded by the Commission the following summary has been prepared. Owing to incomplete data, a large number of cases in each year are omitted, and as the proportion of cases reported is variable e.g., 88 per cent. in 1931-32 and 58 per cent. in 1932-33, the details are not satisfactory for purposes of comparison, one year with another:—

Year	Accidents.			Industrial Diseases.			Total Cases Reported.	Compensation Paid during Year.	
	Fatal.	Non-Fatal.	Total.	Fatal.	Non-Fatal.	Total.			
<i>Males</i>									
1932-33	...	84	23,767	23,851	4	175	179	24,030	£ 483,487
1933-34	...	104	31,558	31,662	12	204	216	31,878	605,842
1934-35	...	89	38,053	38,142	10	318	328	38,470	664,433
1935-36	...	97	43,678	43,775	13	231	244	44,019	784,516
1936-37	...	99	49,809	49,908	16	235	251	50,159	924,745
<i>Females.</i>									
1932-33	...	...	1,426	1,426	...	144	144	1,570	17,984
1933-34	...	1	2,028	2,029	1	215	216	2,245	26,523
1934-35	...	...	2,579	2,579	1	186	187	2,766	27,142
1935-36	...	...	3,295	3,295	...	178	178	3,473	33,688
1936-37	...	2	3,534	3,536	1	208	209	3,745	38,787

The compensation paid in each year includes payments in respect of cases continued from earlier years, but balances payable in respect of cases not brought to finality at the end of the year are excluded.

Of the compensation paid in 1935-36 in respect of male workers, £123,740 were paid for medical treatment and £104,085 in weekly payments to dependants, and the payments in 1936-37 included medical treatment £156,823, and weekly payments to dependants £118,542. Compensation in respect

of female workers included medical treatment £10,654, and dependants £111 in 1935-36, and £13,122 and £117 respectively in 1936-37. The payments for medical treatment relate only to cases compensated by weekly payments.

The average compensation paid to male workers in the last five years was £610 in fatal cases, £176 in cases of disability compensated by lump sums, and £13 7s. in weekly payments and medical expenses. The average amounts paid in respect to female workers were as follows:—Fatal cases, £67; disability, lump sum, £157; other, £8 16s.

The average payment for medical treatment per case in which the cost of treatment was actually paid was £4 15s. for males and £4 12s. for females in 1935-36 and £4 7s. and £4 6s. respectively in 1936-37.

The Workmen's Compensation (Lead Poisoning—Broken Hill) Acts, 1922 and 1924, provide for the payment of compensation in respect of lead poisoning amongst men who had been employed by Broken Hill mine owners prior to 31st May, 1919, when mining operations were interrupted as a result of an industrial dispute. The duties of certifying surgeon or medical referee are entrusted to a board consisting of three medical practitioners appointed by the Governor, including one nominated by the mine owners and one by the workmen.

In terms of the Workmen's Compensation (Broken Hill) Acts, 1920 to 1934, which will remain in force until Parliament otherwise provides, compensation is payable in respect of persons who contracted pneumoconiosis or tuberculosis by reason of employment in the Broken Hill mines. Compensation in respect of those who were employed in the mines after the commencement of the Act of 1920 is paid by the mine-owners, and at 30th June, 1936, payments were being made in respect of 59 cases, including 46 employees who were living. The amount of compensation during 1935-36 was £10,833.

Payments to other persons eligible under Workmen's Compensation (Broken Hill) Acts are made from a fund which is maintained by contributions—one-half by the Government of New South Wales and one-half by the mine-owners. At 30th June, 1936, compensation was payable from the fund in respect of 616 workers, viz., 315 who were living and the dependants of 311 who had died. The amount paid as compensation during 1935-36 was £104,836, funeral and special expenses amounted to £332, and fees and administrative expenses to £2,692. The total disbursements from the fund from 1st January, 1921, to 30th June, 1936, amounted to £1,477,158.

The Workmen's Compensation (Silicosis) Act, 1920, as amended by the Workers' Compensation Act, 1926, empowers the Government to establish a scheme for the payment of compensation with respect to workmen who suffer death or disablement owing to fibroid phthisis or silicosis of the lung, or other diseases of the pulmonary or respiratory organs caused by exposure to silica dust. Provision may be made by the scheme for the establishment of a general compensation fund to which employers in any specified industry involving exposure to silica dust may be required to contribute. In this manner liability in respect of a disease contracted by a gradual process may be distributed amongst the employers concerned.

A scheme of compensation for stonemasons, quarrymen, rock-choppers, and sewer miners employed in the county of Cumberland, entitled the Workmen's Compensation (Silicosis) Scheme No. 1, 1927, was brought into operation in September, 1927, and extended to the counties of Camden and Northumberland in February, 1936. The maximum amount of compensation payable in cases of death is £500; and in the cases of incapacity a weekly payment up to 66 $\frac{2}{3}$  per cent. of the workman's average weekly earnings during the twelve months preceding the date of his injury, but not exceeding £3; the maximum liability in each case being £1,000. The compensation fund into which the employers pay contributions at the rate of 3 per cent. on wages is administered by a joint committee appointed by the Minister for Labour and Industry. Up to the 30th June, 1936, compensation had been awarded in respect of 141 workmen, and at that date compensation was being paid in respect of 77 incapacitated workmen and dependants of 6 deceased workmen. The amount of compensation paid in 1935-36 was £5,575.

## WAGES.

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Wages paid to industrial workers in New South Wales are regulated for the most part by the industrial arbitration tribunals, described in the foregoing chapter.

### *The Living Wage.*

Early legislation empowering industrial tribunals to fix minimum wages, as incidental to the preservation of industrial peace, did not give any direction regarding the principles to be observed in the exercise of the function. In practice, the tribunals adopted the principle of basing their determinations on the living wage, which must be sufficient to secure to the unskilled worker a reasonable standard of living, as distinct from the secondary wage, which is remuneration for skill or other special qualifications.

Details regarding the development of the living wage principle since it was defined by Mr. Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration, in the well-known Harvester case in 1907, are published in earlier issues of the "Year Book," with particulars relating to the standard of living and the living wage determinations. In this issue only a brief description of recent developments and the existing practice is inserted.

In the State jurisdiction, the Industrial Commission was authorised to determine a standard of living not more frequently than once in every six months, after public inquiry, and to declare living wages, based upon the determined standard, for adult men and women; also in terms of an Act passed in December, 1932, to adjust the living wages in April and October in each year, to accord with the increased or decreased cost of maintaining the determined standard. The living wages fixed by the Commission had statutory force as the basis of industrial awards and agreements, and when they were varied the rates of pay in current awards and agreements were deemed to be varied by the same amount of increase or decrease as the living wages. By an amending Act passed in September, 1937, the basic rates for State awards and agreements are to be assessed in accordance with the methods adopted by the Commonwealth Court and as far as practicable brought into uniformity with the basic wages in federal awards and agreements.

Where there is more than one dependent child in the family, wages which do not exceed the living or basic wage standard may be supplemented by family allowances, described on page 244 of this Year Book.

The variations in the living wages, as determined by the industrial authority constituted under State legislation, are shown below. The determinations were made by the Court of Industrial Arbitration in the years 1914 to 1916, by the Board of Trade from 1918 to 1925, and by the Industrial Commission to April, 1937:—

Year.	Men.			Women.	
	Date of Declaration.	Living Wage per week.	Number of Children included in Family Unit.	Date of Declaration.	Living Wage per week.
		£ s. d.			£ s. d.
1914	16th February ...	2 8 0	Two	...	...
1915	17th December ...	2 12 6	"	...	...
1916	18th August ...	2 15 6	"	...	...
1918	5th September ...	3 0 0	"	17th December...	1 10 0
1919	8th October ...	3 17 0	"	23rd December...	1 19 0
1920	8th October ...	4 5 0	"	23rd December...	2 3 0
1921	8th October ...	4 2 0	"	22nd December...	2 1 0
1922	12th May...	3 18 0	"	9th October ...	1 19 6
1923	10th April ...	3 19 0	"	10th April ...	2 0 0
1923	7th September ...	4 2 0	"	7th September...	2 1 6
1925	24th August ...	4 4 0	"	24th August ...	2 2 6
1927	27th June ...	4 5 0	None	27th June ...	2 6 0
1929	20th December ...	4 2 6	One	20th December...	2 4 6
1932	26th August ...	3 10 0	"	26th August ...	1 18 0
1933	11th April ...	3 8 6	"	11th April ...	1 17 0
1933	20th October ...	3 6 6	"	20th October ...	1 16 0
1934	26th April ...	3 7 6	"	26th April ...	1 16 6
1935	18th April ...	3 8 6	"	18th April ...	1 17 0
1936	24th April ...	3 9 0	"	24th April ...	1 17 6
1936	27th October ...	3 10 0	"	27th October ...	1 18 0
1937	24th April ...	3 11 6	"	24th April ...	1 18 6

The family unit covered by the living wage for men consisted of a man, wife, and two children from 1914 to 1925, inclusive; a man and wife only in 1927, with family allowances for dependent children; and a man, wife, and one child in 1929, one child being excluded from family endowment.

### *The Living Wage in Federal Awards.*

The Commonwealth Conciliation and Arbitration Act does not define the basic wage nor the principles to be adopted for its determination, though it prescribes that cases relating to alterations in the basic wage or the principles on which it is computed are to be decided by the Chief Judge and at least two other Judges.

In 1908 the Court adopted as a standard wage the Harvester rate, 7s. per day in Melbourne in 1907, which was based apparently on the needs of a family of "about five persons." Later there developed a custom of inserting in awards and agreements provision for the periodical adjustment of the prescribed rates of wages, according to changes in the cost of living. The adjustments are computed by the use of the retail price index numbers, and may be made at intervals of three or six months or, as in the case of pastoral awards, once a year.

In 1921 the President of the Court (Mr. Justice Powers) decided to add to the Harvester equivalent (ascertained by applying the retail price index numbers to the Harvester wage), the sum of 3s. to cover possible increases in the cost of living during the interval between adjustments.

In February, 1931, the Court directed that a reduction of 10 per cent. should be made in the rates of wages prescribed by federal awards—except those exempted for special reasons. The reduction was applied not only to the basic wage element but also to the “Powers 3s.” and margins above basic rates, which hitherto had remained constant during the currency of awards. This deduction of 10 per cent. operated until May, 1934, though its effect was modified to some extent twelve months earlier by a change in the method of computing the periodical adjustments.

In April, 1934, the Court announced its decision to abolish the “Powers 3s.” to restore the 10 per cent. to margins over the basic wage, to give the basic wage itself a new starting point, and to simplify the method of assessment and adjustment, for which it directed that “All Items” index numbers be used (see page 769). A measure of stability was given by an order that, after 1st June, 1934 (when the basic rates had been adjusted by the index numbers for the quarter January-March, 1934), no change was to be made unless it amounted to at least 2s. per week. Basic rates were determined for a number of provincial towns specified in the judgment, including Newcastle and Broken Hill, and the rates for other localities outside the Metropolitan areas were, as a general rule, 3s. less than the rate for the capital city in the same State. By later decisions the Sydney rates were applied to Port Kembla and to certain industries in Newcastle, *e.g.*, metal trades and timber industry.

In June, 1937, the Commonwealth Court, upon application by unions of employees, reviewed the basic wage and arrived at the conclusion “that the present degree of prosperity in the Commonwealth and the existing circumstances of industry make desirable appreciable increases in the basic wage.” To give effect to its decision, the Court added a fixed loading to current rates, so that the basic wage in the majority of federal awards consists of (a) the “needs” basic wage, which is adjustable upon retail price index numbers, and (b) a loading addition which remains constant at the amount fixed by the Court. The loading was brought into operation in two instalments, the first in July, 1937, and the second in October. The amount is 6s. in New South Wales, Victoria, and Queensland, 4s. in South Australia, Western Australia and Tasmania, and 5s. where the wage is the average for four, five, or six capital cities of Australia; 5s. in the railway undertakings in New South Wales and Victoria, and 3s. in the railways of South Australia and Tasmania. The court decided also to issue its own series of index numbers for the periodical adjustment of the basic wage in its awards. The court series corresponds with the Commonwealth Statistician’s “All Items” series of retail price index numbers described on page 769.

In respect of the living or basic wages, the federal tribunals are not bound to uniformity in the same way as the State industrial tribunals in New South Wales were bound by the declarations of the Industrial Commission. Therefore, in making awards, the Commonwealth Court may take into consideration any special circumstances affecting a particular industry, and the cost of living in localities to which an award relates. For this reason the basic rates in various federal awards sometimes differ in a substantial degree.

The trend of the basic rates generally used in awards of the federal tribunals is illustrated in the following statement of the rates per week for each capital city of Australia at intervals since February, 1929. The Harvester equivalent for Sydney was at the peak in February, 1930.

Date.	Sydney.†	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Average Six Capital Cities.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1929-Feb. ...	91 0	86 0	80 0	84 0	85 0	83 0	87 0
1930-Feb. ...	95 6	90 0	81 0	87 0	83 6	86 8	90 6
Nov. ...	88 0	83 0	70 6	78 0	79 0	82 0	83 0
1931-Feb. ...	76 6	70 2	60 9	66 2	66 2	70 2	71 1
1932-Feb. ...	68 10	63 5	58 6	58 1	60 9	64 10	64 4
1933-Feb. ...	66 7	60 4	55 10	55 4	58 1	63 5	61 8
May ...	67 10	63 4	59 4	59 2	59 9	64 10	64 2
1934-Feb. ...	66 11	63 4	59 4	60 2	59 3	64 10	63 9
May ...	67 0	64 0	61 0	61 0	66 0	65 0	65 0
June ...	68 0	64 0	62 0	62 0	66 0	65 0	66 0
1935-June ...	68 0	66 0	62 0	65 0	68 0	69 0	66 0
Dec. ...	70 0	66 0	64 0	67 0	68 0	69 0	68 0
1936-Dec. ...	70 0	69 0	66 0	69 0	71 0	69 0	68 0
1937-Mar. ...	70 0	69 0	66 0	69 0	71 0	69 0	70 0
June ...	72 0	69 0	68 0	69 0	71 0	69 0	70 0
July ...	75 0	72 0	71 0	70 0	72 0	72 0	73 0
Sept. ...	75 0	73 0	70 0	71 0	73 0	73 0	73 0
Oct. ...	78 0	76 0	73 0	73 0	75 0	75 0	75 0

† Plus Family Endowment, see page 244.

When necessary for an award, the Commonwealth Court assesses a minimum wage for women with regard to the needs of the employees in the industry concerned, and the ratio between the minimum wage for the women and the minimum for the men is preserved in periodical adjustments during the currency of the award. The majority of women working under federal awards are employed in the clothing and printing industries.

#### *Living Wage Determinations in the Various States.*

In Queensland, South Australia and Western Australia a standard living wage is fixed by industrial tribunals established under State jurisdiction. In Victoria and Tasmania the rates of wages in the various industries are fixed by wages boards by a process of collective bargaining between the employers and the employees in the industry concerned. In Victoria it had become the usual practice to assess a basic rate according to the method used by the Commonwealth Court of Conciliation and Arbitration, and an Act which commenced in October, 1934, prescribes that the wages boards must adopt federal award rates where applicable. In Tasmania the standard of the Commonwealth Court is observed to some extent.

In Western Australia the State Arbitration Court determines a basic wage in June of each year, and may review the wage during its currency, if data supplied at quarterly intervals by the State Government Statistician indicate that a change of one shilling or more per week has occurred in the cost of living.

The family unit upon which the basic wage is determined by the State tribunal in Queensland consists of a man, wife, and three children. In South Australia and Western Australia the unit is not defined by legislation, but the respective tribunals have adopted a family unit which includes three children in South Australia and two children in Western Australia.

In New South Wales the unit was a man, his wife and one child and the wage may be supplemented by family allowances at the maximum rate of 5s. per week for each additional child.

The following statement shows the basic wages for adult males which were current in 1928 and subsequent variations as determined by the State industrial tribunals. The rates are per week:—

Year.	Sydney.		Brisbane.		Adelaide.		Perth.	
	Date of Declaration.	Rate.*	Date of Declaration.	Rate.	Date of Declaration.	Rate.	Date of Declaration.	Rate.
		s. d.		s. d.		s. d.		s. d.
1928 ...	...	85 0	...	85 0	...	85 6	...	85 0
1929 ...	Dec. ...	82 6	...	85 0	...	85 6	July ...	87 0
1930 ...	...	82 6	{ Aug. ... Dec ... }	{ 80 0 77 0 }	Oct. ...	75 0	July ...	86 0
1931 ...	...	82 6	May ...	74 0	Aug.	63 0	{ Mar. ... Nov. ... }	{ 78 0 73 6 }
1932 ...	Aug. ...	70 0	...	74 0	...	63 0	{ Mar. ... Nov. ... }	{ 72 0 70 6 }
1933 ...	{ Apr. ... Nov. ... }	{ 68 6 66 6 }	...	74 0	...	63 0	{ Feb. ... July ... }	{ 69 0 68 0 }
1934 ...	Apr. ...	67 6	...	74 0	...	63 0	{ Aug. ... July ... }	{ 69 3 69 6 }
1935 ...	Apr. ...	68 6	...	74 0	Oct. ...	66 0	July ...	70 6
1936 ...	{ Apr. ... Oct. ... }	{ 69 0 70 0 }	...	74 0	Dec. ...	69 6	{ Aug. ... Nov. ... }	{ 72 0 73 9 }
1937 ...	{ Apr. ... Oct. ... }	{ 71 6 78 0 }	Apr. ...	78 0	Nov. ...	74 0	July ...	74 11

\* Plus Family Endowment, from which one child has been excluded since December, 1929.

#### SECONDARY WAGE.

Having ascertained the basic rates of wages for unskilled labour, the assessment of the secondary wages is a matter to be considered separately in connection with each occupation. It is the usual practice, under the State system in New South Wales, when varying wages on account of an increase or decrease in the cost of living, to preserve unaltered the recognised margin between the skilled and the unskilled workmen in an industry, and to vary all rates of wages by the amount by which the basic wage has been increased or reduced.

The Commonwealth Court determines in each case an amount which it considers to be the fair value, as at the date of the award, of the skill required. The 10 per cent. reduction in operation by order of the court from February, 1931, to May, 1934, was applied to the secondary as well as the basic wage.

#### RATES OF WAGES.

The rates of wages for various occupations at intervals since 1901 are shown in the following statement. Except where specified, the figures indicate the minimum amounts payable for a full week's work on the basis of the weekly, daily, or hourly rates fixed by industrial awards and agreements, and for occupations not subject to industrial determinations, the ruling or predominant rates are stated. The table contains particulars of a few occupations only; but similar information relating to a large number of callings is published annually in the "Statistical Register of New South Wales."

In the Register for the year 1920-21 the rates are stated for each year from 1901 to 1913, inclusive, and for 1921; and the following issue contains the rates for each year from 1914 to 1922:—

Occupation.	1901.	1911.	1921.	1929.	1931.	1932.	1934.	1935.	1936.
<b>Manufacturing—</b>	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Cabinetmaker .. ..	52 0	56 0	101 9	108 6	98 0	96 0	93 6	94 6	96 0
Boilermaker .. ..	60 0	66 0	107 0	123 0	92 3	89 1	92 0	97 0	97 0
Coppersmith .. ..	60 0	63 0	100 0	118 6	93 2	90 0	93 0	98 0	98 0
Fitter .. ..	60 0	64 0	107 6	118 6	92 3	89 1	92 0	97 0	97 0
„ electrical .. ..	60 0	66 0	108 6	118 6	118 6	100 0	103 6	104 6	100 0
Baker .. ..	52 6	56 0	100 6	128 0	128 6	113 6	102 0	103 0	104 6
Bootlicker .. ..	45 0	54 0	98 6	102 6	88 0	84 9	81 0	81 0	83 0
Tailor (ready-made) ..	50 0	55 0	102 6	108 0	87 4	81 0	86 0	88 0	88 0
Compositor (jobbing) ..	52 0	60 0	105 0	116 0	90 11	86 5	90 0	92 0	96 0
<b>Building—</b>									
Bricklayer .. ..	60 0	69 0	108 0	126 6	120 6	101 0	102 6	103 6	105 0
Carpenter .. ..	60 0	63 0	110 0	125 0	125 0	112 6	102 6	103 6	105 0
Painter .. ..	54 0	60 0	104 0	116 0	116 0	103 6	101 0	102 0	103 6
Plumber .. ..	60 0	66 0	110 0	127 0	127 0	114 6	112 0	113 0	114 6
<b>Mining—</b>									
Coalwheeler .. ..	42 0	42 0	103 6	109 6	106 6	95 0	95 0	95 0	95 0
			to	to	to	to	to	to	to
Silverminer .. ..	54 0	66 0	99 0	112 0	109 6	109 6	106 6	109 6	109 6
					19 0	93 0	93 0	94 0	95 6
<b>Transport—</b>									
Railway loco-driver ..	66 0	66 0	106 0	114 0	106 6	94 0	91 6	92 6	94 0
	to	to	to	to	to	to	to	to	to
	90 0	90 0	130 0	138 0	130 0	118 0	115 6	116 6	118 0
	1 0								
Wharf-labourer per hour	to	1 6	2 9	2 11	2 2	2 3½	2 5	2 5½	2 6½
	1 3								
<b>Rural industries—</b>									
Shearer .. per 100 sheep	20 0	24 0	40 0	41 0†	32 0(a)	29 3(b)	30 0	30 0	32 6
Station-hand, with keep ..	20 0	25 0	48 0	54 8	42 6	38 2(c)	40 0	40 0	40 0
	15 0	20 0			20 0	25 0	20 0	25 0	25 0
Farm-labourer, with keep	to	to	42 0	55 0	to	to	to	to	to
	20 0	25 0			35 0	35 0	32 6	25 0	35 0
<b>Miscellaneous—</b>									
Pick and shovel man ..	42 0	48 0	94 6	95 0	95 0	81 0	79 0	79 0	80 6
Standard minimum wage ..	*	45 0	82 0	82 6†	82 6†	70 0†	67 6†	68 6†	71 6†

\* Standard not fixed.

† Plus family endowment.

‡ Less 2s. 3d. per week.

(a) Less 7s. 6d. per week. (b) 27s. 3d. per 100 as from 1st January, 1933.

(c) 30s. as from 1st January, 1933.

Prior to the determination of the Harvester rate in 1907 a standard wage was not fixed, and an inspection of the predominant rates in 1901 shows that wages as low as 30s. per week were paid for unskilled labour in some factories, but the average was probably about 35s. per week.

The wages of coalminers are based on contract rates, which vary according to the condition of the seams or places where the coal is mined. The rates had been fixed by awards of a special tribunal under Federal legislation between 1920 and 1929. A dispute occurred in some of the northern mines in March, 1929, and these mines were closed. They remained idle till June, 1930, when an agreement was made and registered under the Commonwealth Conciliation and Arbitration Act, the contract rates being reduced by 12½ per cent. and the daily rates by 6d. per day.

The wages of railway engine-drivers are increased on the completion of each of the first four years of service, the highest rates being paid to drivers of mail and passenger trains. An hourly rate is prescribed for wharf-labouring, and intermittency is a constant factor owing to irregularity in the daily volume of shipping trade. Extra rates are paid for handling special cargoes such as wheat, explosives, and frozen meat.

In the rural industries, rates for shearers and other pastoral employees are fixed by the Commonwealth Court of Conciliation and Arbitration. The contract rate for shearing ordinary flock sheep from September, 1927, to July, 1932, was subject to annual adjustments for cost of living variations.

Period.	Rate per 100 Sheep (Ordinary Flock).	Cost of Living Adjustment (per week).
	s. d.	s. d.
September, 1927, to March, 1928 ... ..	41 0	.....
March, 1928, to March, 1930 ... ..	41 0	Deduct ... 2 3
March, 1930, to July, 1930 ... ..	41 0	Add ... 3 4
July, 1930, to March, 1931 ... ..	32 6	Add ... 3 4
March, 1931, to March, 1932 ... ..	32 6	Deduct ... 7 6
March, 1932, to July, 1932 ... ..	32 6	Deduct ... 21 0
July, 1932, to December, 1932 ... ..	29 3	.....
January, 1933, to May, 1934 ... ..	27 3	.....
May, 1934, to June, 1936 ... ..	30 0	.....
July, 1936 ... ..	32 6	.....
July, 1937 ... ..	35 0	.....

Wages of farm labourers were not fixed by award or agreement until October, 1921, when a living wage for rural workers was declared at the rate of 66s. per week without board or residence, or 42s. per week for those who were provided with board and lodging. The declaration lapsed after a period of twelve months. In October, 1926, an award covering agricultural workers was issued by the Conciliation Committee relating to the industry, and in July, 1927, the living wage for rural employees at the rate of 84s. per week was declared by the Industrial Commission. In December, 1929, rural workers were excluded from the jurisdiction of the State industrial arbitration system, and State awards and agreements applying to such employees were rescinded.

The rates shown in the table for pick and shovel men relate to those engaged in the work of railway construction.

The following table of average rates shows the extent to which changes in the rates for individual occupations have affected wages in various groups of industries, and in all industries combined. The figures represent the average weekly rates of wages payable to adult males in each group of industries, and the weighted average for all groups combined.

For the computations particulars were obtained in respect of 874 occupations. The industrial awards and agreements were the main sources of information, and for occupations not subject to the industrial determinations, the ruling or predominant rates were ascertained from employers and from secretaries of trade unions. The occupations were classified into fourteen industrial groups, and the averages were calculated on the basis of the weekly rates payable to adult male employees in the metropolitan district, except in regard to the mining, shipping, and rural industries, which are conducted for the most part outside the metropolitan area.

In determining the average wage in each group an arithmetic mean was taken; that is, the sum of the rates was divided by the number of occupations, no detailed system of weights being applied owing to the difficulty of obtaining satisfactory data as to the number of persons employed in each occupation. In computing the average for all the industries combined, the average for each industrial group was weighted in accordance with the relative number of all male workers engaged in that group.

The rates shown in the table for 1921 and later years are those determined for New South Wales by the Commonwealth Statistician.

In the shipping, pastoral, and domestic industries, where food and lodging are supplied, the value of such has been added to the rates of wages:—

Group of Industries.	Average Weekly Rates of Wages at end of Year.						
	1911.	1921.	1920.	1931.	1932.	1935.	1936.
1. Wood, Furniture, Sawmill, Timber Works, etc. ...	s. d. 55 6	s. d. 101 0	s. d. 107 9	s. d. 91 6	s. d. 88 5	s. d. 89 1	s. d. 89 11
2. Engineering, Shipbuilding, Smelting, Metal Works, etc. ...	55 4	98 7	103 10	95 11	85 5	87 3	87 10
3. Food, Drink, and Tobacco Manufacture and Distribution ...	51 4	95 2	101 2	95 8	86 5	87 1	88 10
4. Clothing, Hats, Boots, Textiles, Rope, Cordage, etc. ...	51 7	91 10	96 10	85 5	76 7	79 4	79 11
5. Books, Printing, Bookbinding, etc. ...	64 4	106 3	123 6	107 8	101 8	104 1	109 9
6. Other Manufacturing ...	51 7	97 7	103 7	91 9	84 3	84 11	87 0
7. Building ...	63 4	104 7	114 7	109 4	100 7	97 4	98 4
8. Mining, Quarries, etc. ...	60 0	105 4	112 9	106 7	103 1	103 1	103 3
9. Railway and Tramway Services ...	55 2	95 5	107 8	97 2	83 9	85 8	86 2
10. Other Land Transport ...	44 4	92 0	97 1	96 10	84 4	82 9	84 2
11. Shipping, Wharf Labour, etc. ...	44 6	100 5	106 2	82 11	80 2	85 4	87 0
12. Pastoral, Agricultural, Rural, Horticultural, etc. ...	43 5	92 0	100 9	84 0	75 11	70 7	72 3
13. Domestic, Hotels, etc. ...	44 3	89 0	92 7	92 1	79 7	78 6	80 1
14. Miscellaneous ...	49 0	91 5	96 5	91 4	81 4	81 0	82 6
All Industries ...	51 5	95 10	102 11	93 5	84 11	84 2	85 6

At the end of 1921 the average rate of wages for all industries was 86.4 per cent. above the average of 1911. In the following years the average rose and fell alternately, and in 1925 it was at a point slightly above the average in 1921. There was an increase in each succeeding year until June, 1929, when the average, 103s. 6d. per week, was double the average of the year 1911.

At the end of the year 1929 the living wage declared by the Industrial Commission of New South Wales was reduced by 2s. 6d. per week, and State rural awards were rescinded. During 1930 and 1931 the "Harvester equivalent" for Sydney declined, the wages of coal-miners and of pastoral workers under federal jurisdiction were reduced, and the majority of rates determined under federal jurisdiction were reduced by 10 per cent. by order of the court. Under these influences the average nominal wage declined to 93s. 5d., though the living wage in State jurisdiction remained constant at 82s. 6d. from December, 1929, to August, 1932. During 1932 the basic rates under State and federal jurisdiction were lowered by 12s. 6d. and 3s. 2d. respectively, and the average nominal wage fell by 8s. 6d. to 84s. 11d.

The living wages reached the lowest level of the depression period in 1933 and the average nominal wage in December was 81s. 11d., or 21s. per week less than in December, 1929.

#### *Index Numbers—Nominal and Effective Wages.*

The foregoing tables relate to the nominal rates of wages, that is the actual amounts of money payable in return for labour, and in order to show the effective value of these amounts it is necessary to relate them to the purchasing power of money as in the following statement. For this purpose the average rates of wages have been reduced to index numbers, and these

index numbers have been divided by index numbers of retail prices in Sydney computed from the Commonwealth Statistician's "All Items" index numbers, "C" series (see page 769). The results indicate the changes in the effective wage.

For the years 1921 and 1922 the "All Items" index numbers of retail prices are available for the month of November only, and in the statement they are related to the average nominal wage at the end of these years. The nominal wages for other years represent the means of the average rates at the end of the four quarters.

Year.	Average Nominal Wage for a Full Week's Work.		Index Number of Retail Prices, Sydney, "all Items," ‡	Index Number of Effective Wage. (Full Work.)
	Amount.	Index Number.		
	s. d.			
1921	95 10*	998	1025†	974
1922	91 6*	953	1001†	952
1923-27	96 0	1000	1000	1000
1928	102 7	1069	1022	1046
1929	103 1	1074	1052	1021
1930	101 8	1059	1006	1053
1931	94 10	988	904	1093
1932	88 10	925	850	1088
1933	84 0	875	816	1072
1934	82 10	863	825	1046
1935	83 7	871	835	1043
1936	84 9	883	849	1040

\* At end of year. † November. ‡ Commonwealth Statistician's index numbers, converted by taking the index number for Sydney, with the average of Six capitals in 1923-27 as base, equal to 1,000.

During the early years of depression, retail prices declined more rapidly than rates of wages, and in 1931 the effective wage for full work was more than 9 per cent. higher than in the base period 1923 to 1927. In 1934 it fell by  $3\frac{1}{2}$  per cent., and there has been a slow decline during the last three years.

The rates of wages, nominal and effective, as stated in the foregoing tables, are based on the rates payable to employees under awards or agreements or on predominant rates for work without intermittency or overtime, and not on actual earnings, which are liable to fluctuate on account of the rise and fall in the volume of employment.

## PRODUCTION.

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The value of production, as shown in this section, relates to the primary industries—pastoral, agricultural, dairying and farmyard, mining, forestry, fisheries, and trapping—and to the manufacturing industries.

The values of rural production in the table on page 823 are stated as at the point or place of production, on the basis of the prices to the producers, which are somewhat less than the wholesale prices in the metropolitan market. No deduction has been made on account of the cost of items such as seed, fertilisers, containers, fodder for animals, machinery, etc. The net values are shown on page 826.

Some of the quotations of the value of production are known to be understated. For instance, the values as estimated for agricultural and farmyard produce are deficient, because records are not available as to production (which in the aggregate must be large) on areas less than one acre in extent. The production from fisheries includes only the catches of licensed fishermen.

The figures showing the estimated value of mining production in each year from 1911 to 1919-20 inclusive are based on the records of the Department of Mines, of which details are stated in the chapter of this volume relating to the mining industry. The values as recorded by the Department have been reduced by the exclusion of certain values which are included here in the production of the manufacturing industries, *e.g.*, coke produced at coke works, also the value added to minerals in the manufacture of lime and cement at limestone quarries, and in the treatment of ores at mines. The values shown for 1921 and subsequent years are those supplied by the mine-owners in returns collected under the Census Act, and they indicate the estimated value at the mines of the minerals raised during each year. The figures do not represent exact values, but may be considered to be the best estimates which may be made from the data available. The values for 1925-26 and later years include the production from quarries; in earlier years only the output from quarries held under mining title was included.

The value of the manufacturing production is taken as the value at the factory of the manufactured goods less the cost of materials, water, fuel, and electricity, and containers used, and of tools replaced. With a few exceptions returns are not collected as to the production in small establishments employing less than four hands where manual labour only is used, nor from butchers' smallgoods factories.

For the foregoing reasons the aggregate value of production as stated is not complete, and should not be assumed to be the total fund available as the wages fund of the State nor as remuneration for the agents of production in the form of wages, rent for land, and interest on capital invested. The values quoted for the specified industries do not include the value added by reason of transportation to market and distribution to the consumer, nor, in the case of exports, carriage to the point of shipment. Moreover, the earnings of many important activities, such as the building industry, of which records are not available, or from railway construction or commercial and other pursuits are not included.

Thus it will be seen that the amounts quoted have several shortcomings, nevertheless they are valuable as indicating the increase or decrease in the annual production of the industries specified and as important data for measuring variations in the national income.

The following statement shows the estimated value of production of the specified industries, at the place of production, at intervals since 1871. The values relate to the calendar year up to 1915-16 when the year ended June was substituted. The values for mines and quarries are an exception, as those stated for the years 1915-16 to 1931-32 relate to the calendar years 1916 to 1932, and those for 1932-33 to 1934-35 to the calendar years 1932 to 1934, respectively:—

Year.	Primary Industries.							Manu- facturing Industries	Total, Primary and Manu- facturing Industries.
	Rural Industries.				Forests, Fisheries, and Trap- ping.	Mines and Quarries.	Total, Primary Indus- tries.		
	Pastoral.	Agri- cultural.	Dairying and Farmyard.	Total, Rural Industries.					
1871	£ 000 7,609	£ 000 2,220	£ 000 1,110	£ 000 10,939	£ 000 324	£ 000 1,626	£ 000 12,889	£ 000 2,490	£ 000 15,379
1881	10,866	4,216	2,285	17,367	492	2,138	19,997	5,183	25,180
1891	14,725	3,615	2,735	21,075	758	6,434	28,267	7,799	36,066
1901	12,447	7,060	3,188	22,695	986	5,681	29,362	10,011	39,373
1911	20,586	9,749	6,534	36,869	2,213	7,392	46,474	19,432	65,906
1912	19,431	11,817	7,192	38,440	2,347	8,177	48,964	22,681	71,645
1913	21,555	12,378	7,063	40,996	2,644	8,712	52,352	23,764	76,116
1915-16	23,494	20,362	7,649	51,505	2,603	7,478	61,586	25,235	86,821
1920-21	20,336	32,373	16,447	69,156	4,089	10,192	83,437	43,128	126,565
1925-26	32,704	19,655	14,574	66,933	5,778	13,324	86,035	64,838	150,873
1926-27	42,911	21,816	14,581	79,308	6,305	13,873	99,486	69,849	169,335
1927-28	41,593	15,444	15,132	72,169	5,396	11,936	89,501	71,805	161,306
1928-29	40,679	19,356	14,559	74,594	5,298	10,207	90,099	73,627	163,726
1929-30	26,354	15,269	14,539	56,162	4,316	8,444	68,922	66,848	135,770
1930-31	17,835	12,328	12,039	42,202	2,669	6,341	51,212	49,524	100,736
1931-32	19,331	14,547†	11,525	45,403	2,578	6,227*	54,208	46,653	100,861
1932-33	21,373	17,474†	11,462	50,309	2,706	6,227*	59,242	49,569	108,811
1933-34	34,662	14,302†	11,713	60,677	3,381	6,685	70,743	54,042	124,785
1934-35	23,931	15,161†	12,885	51,977	3,437	7,239	62,658	61,430	124,083
1935-36	33,641	16,796†	14,112	64,549	4,165	8,045	76,759	69,470	146,229

† Including Government assistance to wheat growers, viz., £992,500 in 1931-32, £1,012,902 in 1932-33, £911,094 in 1933-34, £1,121,600 in 1934-35 and £564,368 in 1935-36.

\* Calendar year 1932, see context above.

The total value of production increased in each decade between 1871 and 1891. During the early nineties there was a decline from which the recovery was slow. In 1901, however, the value of production was considerably higher than in 1891. During the succeeding decennium the State entered upon a period of industrial expansion, and the value of production rose rapidly. The increase during the decade 1911 to 1921 was due mainly to enhanced prices.

In 1926-27 the value £169,300,000, was the highest yet recorded, and it was maintained at a high level in the two following seasons. Then there was a rapid decline in all industries and the value in 1930-31 and 1931-32 was less than £101,000,000. In 1932-33 and 1933-34 there were increases of £8,000,000 and £16,000,000 respectively. The total value receded slightly in 1934-35 then rose by £22,000,000 to £146,229,000—the highest recorded since 1928-29.

Apart from seasonal influences, fluctuations in the value of pastoral production are mainly the result of variations in the prices of wool. These were very low in the three seasons 1930-31 to 1932-33, and the average annual value of the wool was only £15,000,000, as compared with £32,700,000 in the three seasons ended June, 1929. In 1933-34 its value was nearly £30,000,000, then it declined again to £18,000,000. The value in 1935-36 was £33,600,000.

In agriculture wheat is the outstanding product, and seasonal conditions which affect the extent of cultivation and the size of the harvests are the cause of frequent fluctuations in the annual values of production, apart from the variations in the price of this cereal which depends upon the state of oversea markets, rather than upon local supply and demand. When the influence of both factors—season and price—bears in the same direction, up or down, the fluctuations are considerable. The highest value of agricultural production was recorded in 1920-21, when the wheat harvest was bountiful and the price unusually high, the value of the grain, 55,600,000 bushels, being £20,000,000. Harvests in recent years have exceeded the crop of 1920-21, but the value has been comparatively small. The crops in 1934-35 and 1935-36 were nearly 49,000,000 bushels, for which the growers received £7,100,000 and £8,100,000 respectively, including Government subsidy. The value of the 1936-37 crop of 54,800,000 bushels, will be appreciably higher than these amounts.

The annual value of dairying and farmyard production was remarkably constant from 1924-25 to 1929-30 then it declined by 21 per cent. in the course of two seasons. During more recent seasons production expanded sufficiently to offset a heavy decline in prices, and in 1935-36 when production decreased there was a rise in prices.

In the mining industry coal is the principal product, and the value of the output of the collieries decreased from £9,600,000 in 1927 to £4,100,000 in 1932, and in 1936 it was still below £5,000,000. The condition of the oversea market usually exerts the most powerful influence on the production of metals, which fluctuates accordingly. The output from metalliferous mines declined from £3,000,000 in 1926 to £1,300,000 in 1931, but has risen in each succeeding year. The production of the mines in 1935 was estimated as follows:—Coal mines £4,585,000, other mines £2,407,000, and quarries £1,053,000. Corresponding values in 1936 were £4,921,000, £3,508,000, and £1,261,000.

The figures relating to the manufacturing industries disclose a steady advance from the beginning of the period under review, when it was less than £2,500,000, until 1928-29, when the value was £73,627,000. In the next

three years there were successive decreases and the value in 1931-32 was lower by £27,000,000 than in 1928-29. In each succeeding year there was steady improvement.

In the following table the estimated value of production, as at place of production, is shown in relation to the population in each year.

Year.	Primary Industries.							Manufacturing Industries	Total Primary and Manufacturing Industries.
	Rural Industries.				Forests, Fisheries, and Trapping.	Mining.	Total, Primary Industries.		
	Pastoral.	Agricultural.	Dairying and Farm-yard.	Total, Rural Industries.					
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1871	14 19 5	4 7 5	2 3 8	21 10 6	0 12 9	3 4 0	25 7 3	4 18 0	30 5 3
1881	14 4 0	5 10 2	2 19 9	22 13 11	0 12 11	2 15 11	26 2 0	6 15 6	32 18 3
1891	12 17 10	3 3 4	2 7 11	18 9 1	0 13 3	5 12 8	24 15 0	6 16 7	31 11 7
1901	9 2 1	5 3 4	2 6 8	16 12 1	0 14 5	4 3 1	21 9 7	7 6 6	28 16 1
1911	12 7 3	5 17 1	3 18 6	22 2 10	1 6 7	4 8 9	27 18 2	11 13 5	39 11 7
1912	11 2 10	6 15 6	4 2 0	22 0 10	1 6 11	4 13 9	23 1 6	13 0 2	41 1 8
1913	11 16 11	6 16 0	3 17 7	22 10 6	1 9 1	4 15 8	23 15 3	13 1 2	41 16 5
1915-16	12 8 1	10 14 11	4 0 9	27 3 9	1 7 6	3 18 11	32 10 2	13 6 5	45 16 7
1920-21	9 14 8	15 9 11	7 17 5	33 2 0	1 19 1	4 17 7	39 18 8	20 12 10	60 11 6
1925-26	14 1 11	8 9 5	6 5 8	28 17 0	2 0 9	5 14 10	37 1 7	27 18 11	65 0 6
1926-27	18 1 4	9 3 8	6 2 9	33 7 9	2 13 1	5 16 10	41 17 8	20 8 2	71 5 10
1927-28	17 1 10	6 7 0	6 4 5	29 13 3	2 4 4	4 18 2	36 15 9	20 10 3	66 6 0
1928-29	16 7 6	7 15 10	5 17 2	30 0 6	2 2 8	4 2 2	36 5 4	29 12 9	65 18 1
1929-30	10 9 3	0 1 3	5 15 5	22 5 11	1 14 4	3 7 0	27 7 3	26 10 10	53 18 1
1930-31	7 0 2	4 16 11	4 14 7	16 11 8	1 1 0	2 9 10	20 2 6	19 9 2	39 11 8
1931-32	7 10 7	5 13 3	4 9 10	17 13 8	1 0 1	2 8 9	21 2 3	18 3 4	39 5 7
1932-33	8 5 0	6 14 10	4 8 6	19 8 4	1 0 11	2 8 1	22 17 4	19 2 7	41 19 11
1933-34	13 5 3	5 9 5	4 9 8	23 4 4	1 5 11	2 11 2	27 1 5	20 13 7	47 15 0
1934-35	9 1 8	5 15 1	4 17 10	19 14 7	1 6 1	2 15 0	23 15 8	23 6 4	47 2 0
1935-36	12 13 3	6 6 6	5 6 3	24 6 0	1 11 4	3 0 7	23 17 11	26 3 0	55 0 11

The value of production per head from the pastoral industry was considerably greater in 1871 and 1881—when sheep-raising was the staple industry of the colony and pastoral output represented nearly half the total value of production—than in subsequent years when the population had entered into other activities and the export trade in wheat, butter, etc., was developed.

The development in the manufacturing industries in 1871 and in 1881, as measured by the value of output per head of population, was not so great as the figures appear to indicate. The production included the output from several classes of machines used in connection with the agricultural industry and not, strictly speaking, factories; and most of the industries were subsidiary to agricultural and pastoral activities, viz., boiling-down works, fellmongering, woolwashing, grain mills, chaffcutting, soap and candle works.

#### ESTIMATED NET VALUE OF PRODUCTION—PRIMARY INDUSTRIES.

The foregoing estimates of the value of primary production represent gross values (at the place of production), including such costs as fodder consumed by farm stock, seed, fertilisers, spraying, power and water used in irrigating, etc. By deducting the estimated cost of these items from the gross values, the net values of primary production have been estimated for

the years 1925-26 to 1935-36 as follows. No deduction has been made for depreciation of capital, machinery or plant:—

Year.	Pastoral.	Agricultural.	Dairying and Farm-yard.	Total Rural Industries	Forestry, Fisheries, Trapping.	Mining.	Total Primary.
	£000	£000	£000	£000	£000	£000	£000
1925-26 ...	32,365	16,178	12,409	60,952	5,756	11,058	77,766
1926-27 ...	42,701	17,743	12,003	72,447	6,268	11,421	90,136
1927-28 ...	41,095	12,137	12,844	66,076	5,355	10,031	81,462
1928-29 ...	40,356	15,631	12,092	68,079	5,241	8,722	82,042
1929-30 ...	25,951	11,373	11,719	49,043	4,252	7,019	60,314
1930-31 ...	17,592	9,776	10,383	37,751	2,608	5,249	45,608
1931-32 ...	19,024	12,969	9,624	41,617	2,527	5,074	49,218
1932-33 ...	20,993	15,124	9,291	45,408	2,653	5,074	53,135
1933-34 ...	34,259	11,724	9,843	55,826	3,337	5,597	64,760
1934-35 ...	23,311	12,787	10,788	46,886	3,386	6,055	56,327
1935-36 ...	32,799	14,139	11,466	58,404	4,117	6,792	69,313

Details regarding deductions from the gross values are published in the chapters of this Year Book relating to the rural industries.

#### PRINCIPAL PRODUCTS.

The following statement shows, in regard to the principal commodities, the average annual production, absolute and per head of population, during four periods of three years each, viz., (1) the pre-war years 1911 to 1913, which were years of high production, (2 and 3) the years at the beginning and end of the period of post-war expansion, and (4) the three years ended June, 1936:—

Product.		Average Annual Production (000 omitted).				Average Production Per Head of Population.			
		1911-13.	1921-23.	1927-29.	1934-36.	1911-13.	1921-23.	1927-29.	1934-36.
Wool (as in the grease) ...	lb.	370,221	315,341	475,367	483,985	212.4	147.8	195.6	183.7
Meat, Frozen (Exported)—									
Beef ...	...	11,120	10,271	6,895	9,507	6.4	4.8	2.8	3.6
Mutton ...	...	63,828	41,525	28,767	62,193	36.6	19.5	11.8	23.6
Butter ...	...	79,198	86,222	98,130	140,048	45.4	40.5	40.4	55.2
Cheese ...	...	5,845	6,234	6,787	8,291	3.4	3.0	2.8	3.1
Bacon and Ham ...	...	15,940	18,642	24,390	20,939	9.1	8.8	10.0	7.9
Wheat ...	bush.	31,865	42,353	41,280	51,519	18.3	19.9	17.0	19.6
Maize ...	...	4,691	3,813	3,345	3,233	2.7	1.8	1.4	1.2
Potatoes ...	cwt.	1,824	1,046	847	1,016	1.0	0.5	0.4	0.4
Hay ...	...	18,612	23,100	16,168	18,418	10.7	10.8	6.7	7.0
Coal ...	ton	9,664	10,485	9,397	7,897	5.5	4.9	3.8	3.0
Coke ...	...	461	813	1,035	1,065	0.3	0.4	0.4	0.4
Gold ...	oz.	200	32	13	38	0.1	0.0	0.0	0.0
Silver* ...	...	14,183	8,741	9,009	8,507	8.1	4.1	3.7	3.2
Lead* ...	cwt.	4,204	2,244	3,457	3,637	2.4	1.1	1.4	1.4
Zinc* ...	...	3,553	2,447	2,798	2,309	2.0	1.2	1.1	0.9
Timber, (Native) Sawn ...	sup. ft.	156,617	148,938	148,506	115,660	97.0	74.0	62.8	43.9
Fish, Fresh ...	lb.	15,499	20,588	27,498	22,715	8.9	9.7	11.2	8.6
Rabbit Skins (Exported) ...	...	5,305	6,747	9,800	6,519	3.0	3.2	4.0	2.5
Iron, Pig ...	cwt.	771	5,373	9,056	13,127	0.4	2.5	3.7	5.0
Steel Ingots ...	...	...	3,989	8,327	13,571	...	1.9	3.4	5.2
Portland Cement ...	...	2,374	3,778	8,418	5,008	1.4	1.7	3.5	1.9
Beer and Stont ...	gal.	22,253	24,845	28,308	21,970	12.8	11.7	11.6	8.3
Tobacco ...	lb.	6,370	12,211	14,914	13,163	3.7	5.7	6.1	5.0
Biscuits ...	...	24,175	30,244	43,744	36,325	13.9	18.4	18.0	13.8
Boots and Shoes ...	pairs	3,752	4,174	5,007	6,799	2.2	2.0	2.1	2.6
Bricks ...	1,000	366,985	339,721	435,631	249,677	210.5	159.2	179.2	94.8
Electricity ...	units	165,249	386,742	892,365	1,347,340	94.8	181.3	367.1	511.4
Gas ...	1,000 cub. ft.	4,878	8,465	10,555	9,761	2.8	4.0	4.3	3.7
Jam and Preserved Fruit ...	lb.	27,767	30,396	31,498	37,843	15.9	14.3	13.0	14.4
Soap ...	...	31,670	37,085	52,341	46,353	18.2	17.4	21.5	17.6
Sugar, Refined ...	cwt.	1,834	2,373	3,038	2,598	1.1	1.1	1.2	1.0
Meat, Preserved ...	lb	25,501	4,320	4,948	4,909	14.6	2.0	2.0	1.9

\* Estimated contents of ore raised.

The statement shows that there has been a substantial increase since 1911-13 in the annual production of such commodities as wool, butter, cheese, bacon and hams, wheat, coke, fish, rabbit skins (for export), iron and steel, cement, tobacco, boots and shoes, electricity, gas, jam and soap.

In some cases, however, the increase has not been proportionate to the growth of population. There has been a decline in the annual production of frozen and preserved meat, potatoes, coal, silver, lead and zinc, native timber, beer and bricks.

In comparison with the experience of the three years ended June, 1929, the annual production of wheat, butter, and some other rural products, iron and steel, boots and shoes, and electricity was greater, absolutely and relatively to the population, during the three years ended June, 1935.

Annual variations in the quantity and value of the chief rural products—wool, wheat, and butter—are shown below. A comparison of average values per unit is shown also, viz., (a) the average price per lb. of greasy wool at Sydney auctions where the bulk of the clip is sold; (b) the average price per bushel paid to the farmers for wheat delivered at country railway stations—less the cost of bags, but exclusive of bounties and subsidies from State or Federal Governments which amounted to 4½d. per bushel in 1931-32, about 3d. in 1932-33, nearly 4d. in 1933-34, about 5½d. in 1934-35 and 2½d. in 1935-36; (c) in regard to milk used for butter, the average price paid at the butter factories to suppliers for milk and cream, is stated as per lb. of butter made therefrom:—

Year.	Wool.			Wheat—(grain).			Butter.*		
	Quantity (as in grease).	Value to Grower.	Average Price per lb. (greasy) Sydney Sales.	Quantity.	Value to farmer.	Average price per bush. at Country Railway (less cost of bags).	Quantity.	Value of milk used.	
								Total.	Per lb. of butter.
	000 lb.	£000	d.	000 bush.	£000	s. d.	000 lb.	£000	d.
1911	404,655	14,085	8½	25,088	4,113	3 3	83,205	3,631	10½
1912	326,557	12,483	8½	32,487	5,239	3 3	76,610	3,895	12½
1913	379,450	14,437	9½	38,020	5,988	3 2	77,779	3,450	10½
1920-21	275,269	13,023	12½	55,625	20,164	7 3	84,268	8,411	24
1925-26	402,490	26,223	16½	33,806	8,590	5 1	106,968	7,045	15½
1928-29	482,920	30,879	16½	49,257	9,851	4 0	95,337*	6,779	17
1929-30	459,970	18,099	10½	34,407	5,448	3 2	104,175*	6,842	15½
1930-31	427,220	13,705	8½	65,877	5,215	1 7	113,237*	5,931	12½
1931-32	501,648	15,233	8½	54,966	8,130†	2 7†	123,253*	5,750	11½
1932-33	532,080	16,659	8½	78,389	9,800†	2 3†	128,210*	5,018	9½
1933-34	484,390	29,951	15½	57,057	7,013†	2 2†	147,963*	5,167	8½
1934-35	494,981	18,045	9½	48,678	7,150†	2 6†	145,278*	5,694	9½
1935-36	472,585	25,408	14	48,822	8,137†	3 1†	124,266	5,765	11½
1936-37 (a)	503,000	32,000	16½	54,837	12,800	4 8	109,800	5,700	12½

\* Made in New South Wales from cream produced in the State, butter made from cream imported or exported Interstate being excluded. † Excluding Government bounty, etc.

‡ Includes Government bounties and subsidies. (a) Preliminary.

The average price of greasy wool during the three years 1911 to 1913 was 8½d. per lb. and it reached an extraordinary level, 25½d., in 1924-25. Increased production offset to a large extent the fall in prices in later seasons until 1929-30 when the average price declined to 10½d. per lb. Then a further decline occurred, the average for greasy wool being 8.7d. per lb. in 1930-31, and 8.3d. per lb. in 1931-32. The average price of the wool produced in 1932-33 was slightly higher, and towards the close of the sales there was a definite rise in prices, leading to an average of 15.8d. for the season 1933-34. In the following season the average was only 9½d., then a substantial improvement took place and the averages for 1935-36 and 1936-37 were 14d. and 16.4d. respectively.

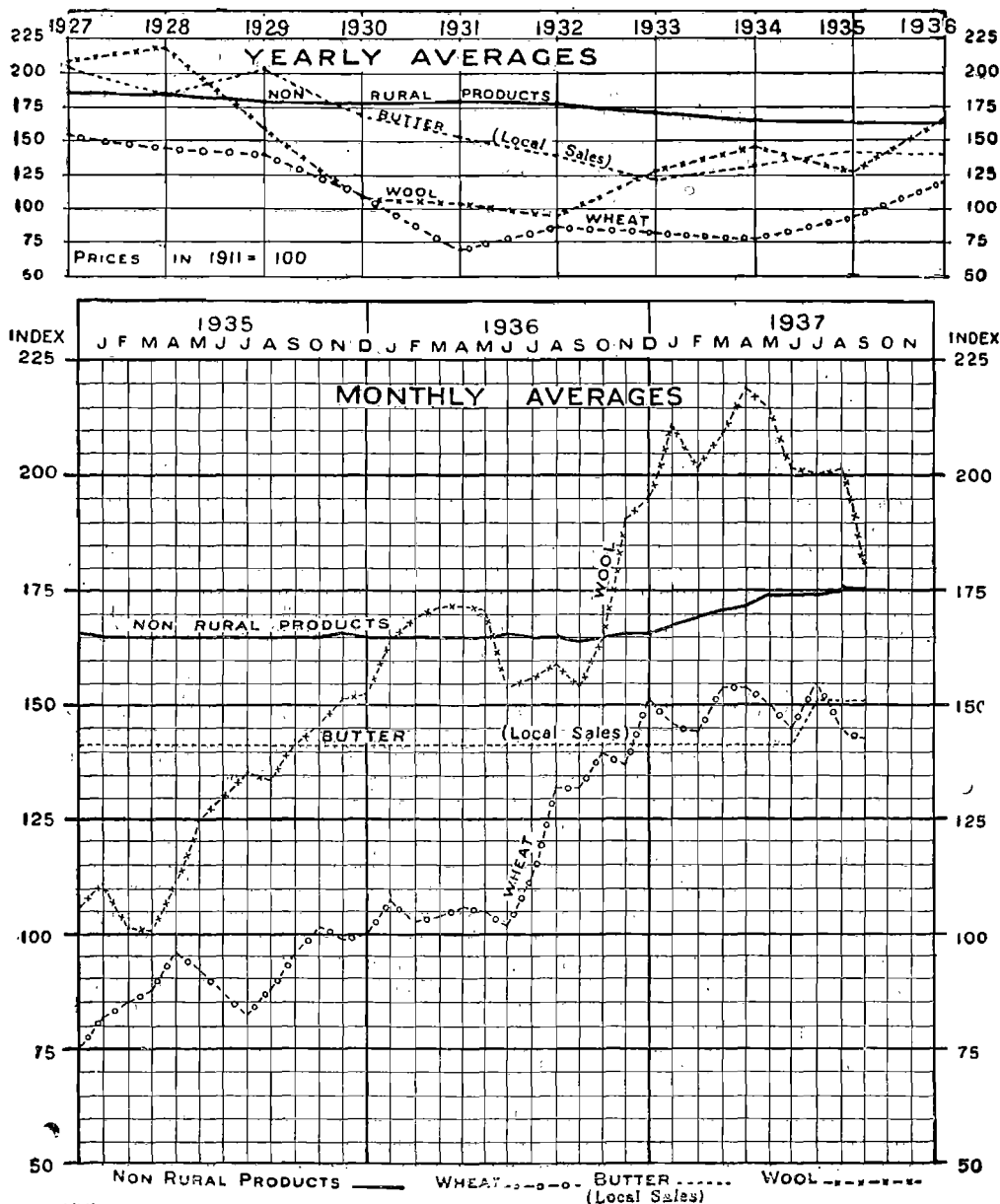
In 1920-21 the wheat harvest was large and the prices high. Variations in the value of the crop in other seasons under review were due to changes in the volume of production rather than in prices until 1931 when the return was lower than in any year since 1911,

though the crop exceeded previous records. The price was much higher in 1931-32, but did not improve further until 1935, and the farmers were assisted by Government subsidy as shown on page 827.

Dairy farmers are paid for cream supplied to butter factories according to the amount of butter made therefrom, and since 1st January, 1926, the prices of butter have been subject to arrangements for stabilising markets, as described in the chapter "Dairying Industry" of this volume.

The movements in prices of wheat, wool, butter (local sales), and non-rural products since 1927 are illustrated in the following graph:—

**WHOLESALE PRICES, SYDNEY, 1927-1937.**  
**WOOL, BUTTER, WHEAT AND NON-RURAL PRODUCTS.**



The quotations for the various commodities, as illustrated in the graph, are as follows:—

*Wheat.*—The average of shippers' and millers' quotations for bagged wheat ex trucks, Sydney.

*Wool.*—Average prices for greasy wool based on the actual prices realised at Sydney auctions during each month for typical grades of merino wool.

*Butter.*—The average wholesale price in Sydney of choicest quality for local consumption as fixed by the committee organised for supervising the marketing of the butter.

The index numbers of non-rural products relate only to seventy-four items included in the general index of wholesale prices (see page 764), and no highly manufactured commodities have been taken into consideration.

## INDUSTRIAL HISTORY OF NEW SOUTH WALES.

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An account of the Industrial History of the State up to 1899 appears in the "Wealth and Progress of New South Wales, 1897-8," and is continued on a broader basis in the "Official Year Book, 1921." A resumé of developments from 1921 to 1929 appears in the Year Book of 1928-29 and is here continued in outline for later years to the middle of 1937.

### 1928-29.

The prospects of a quick recovery in industrial conditions which had become unsatisfactory during 1927-28 were diminished by a number of internal factors and were finally extinguished towards the close of the following year by the course of price movements oversea.

There was early anxiety regarding the wheat crops and pastures, occasioned by the absence of rain in August and September and the prevalence of warm, drying winds in pastoral districts during the latter month. Timely falls over the wheat belt in October, however, assured a large harvest, and as the wool production was the second highest on record, the high value of production from rural industries helped materially to sustain the position. In the closing months of 1928 and at the beginning of 1929 signs of some improvement were evident, notably in the slight diminution in unemployment. But, unfortunately, the continuance of dry weather until February, 1929, and again from May to August, retarded ploughing and sowing and seriously discounted agricultural and pastoral prospects for the ensuing season throughout the southern half of the hinterland.

The supply of money upon the loan markets of the world became depleted and the development of adverse conditions both at home and abroad rendered Australia unable either to borrow new money or to fund her existing floating debts. In January, 1929, the completion of a number of Government works threw a considerable number of men out of employment, and in the same month, following an award which increased their working week from forty-four to forty-eight hours, about 4,000 timber employees ceased work, and the dispute continued until October, 1929, when work was resumed in terms of the award. Although the industry was carried on meanwhile by voluntary labour, its operations were necessarily restricted, with consequential effects on the building industry, activity in which was also reduced by the general economic decline.

Depression was widespread in the coal industry and, recognising its increasingly ill effect on industry, the Government put forward a scheme designed to regain lost trade overseas, to retain interstate trade, and stimulate Australian consumption by a reduction in the price of coal. The scheme was rejected by the employees as involving a reduction of wages, and on 1st March, 1929, all except two of the associated northern mines were closed by the proprietors and remained closed for fifteen months. This action left 12,000 men without employment and was the final factor in raising the number of unemployed beyond the level of any previous year of which records are available.

It was not surprising in the circumstances that trading operations, as indicated by banks' exchange settlements, were only equal in volume to those of the previous year, showing no expansion. Business of all kinds suffered from the uncertainty of the seasonal outlook in the spring of 1928, by the dislocation in the coal-mining and timber industries and the resultant

increase in unemployment in 1929, and finally by the sudden and severe break in the wool market in June, 1929, coupled with an intensification of the depression that was settling on the rest of the world. This produced a sudden transformation in the Australian outlook.

The banking position remained strong during the year. Deposits in private accounts in private banks increased by £4,200,000, and though advances were expanded by £12,400,000 in order to meet the depression, there still remained a reserve of loanable funds.

The prices of stock were maintained generally, and during the greater part of the year money was readily available for investment, with a decided preference in the final quarter for Government stocks and gilt-edged securities.

#### 1929-30.

The general economic situation in New South Wales became increasingly merged into that of the Commonwealth of Australia and the Australian situation into that of the world under the influence of an acute world-wide depression which developed with increasing severity through the latter part of 1929 and the whole of 1930. The steady decline which had been evident in world prices since 1925 began to accelerate rapidly about the middle of 1929, and during 1930 prices reached disastrously low levels. Practically every staple commodity and every country in the world was affected by this movement and nearly the whole of the goods exported from Australia for sale overseas suffered under the decline in prices, which was especially severe in respect of our staple exports—wheat and wool. There resulted a fall of approximately £13,000,000 in the value of merchandise exported overseas from New South Wales in 1929-30 as compared with the preceding year. This amount was equivalent to nearly 35 per cent. of the income normally earned by the exporting industries, and its loss caused a disturbance of the balance of distribution of real income. This disturbance was increased by the cessation of the flow of loan moneys from abroad as from January, 1929, resulting in curtailment of industries and enterprises which had for many years been dependent on the regular introduction of new capital into the State.

An acute industrial depression ensued, which was reflected in a diminished volume of business, widespread unemployment coupled with "rationing" of employment, falling prices, lower profits, a severe decline in the values of real property and of most securities and investments, and a heavy diminution in deposits in trading and savings banks, accompanied by a large increase in the ratio of advances. The activities of the manufacturing industries (which had expanded almost continuously over a long period of years) showed an average diminution of nearly 10 per cent., and building operations declined rapidly to only 20 per cent. of the volume of preceding years. The principal rural industries (except wheat-growing, which was affected in some degree by an adverse season) maintained the large volume of output of previous years, but were affected by the heavy fall in values. The coal and metalliferous mining industries suffered heavy decline. At the same time, the earnings of governmental enterprises, such as railways and tramways, diminished and the yield of taxation decreased. There resulted in this, as in practically every State of Australia, adverse budget balances. Bank advances were heavily increased and exceeded deposits for the first time in many years.

In the early part of 1930 the Government of New South Wales passed legislation re-introducing the 48-hour week, reducing the salaries of members of Parliament and of Government employees, and imposing a tax on all incomes in order to raise funds for the relief of unemployment. The

Federal Government took action to correct the adverse trade balance by restricting the volume of imports by prohibition, rationing and the imposition of increased import duties. Rates of federal income tax were increased, and a sales tax was imposed.

In February, 1930, the first of a series of Premiers' Conferences was called to devise means of meeting the position.

#### 1930-31.

The economic depression intensified throughout the world during 1930-31, and there was a continued diminution in business and industrial activity in New South Wales.

During the year the volume of activity in secondary industries (as shown by factory returns) and in general business (as measured by bank clearings) continued to contract sharply to a point between 30 per cent. and 40 per cent. below the level existing immediately before the access of depression. The decline was in consonance with the decline in value of rural production, which had fallen from £74,600,000 in 1928-29 to £56,200,000 in 1929-30 and £42,200,000 in 1930-31.

In particular, the index of bank clearings, which in June, 1930, was 90 per cent. of pre-depression level, was in the vicinity of 65 per cent. in June, 1931. Factory employment, which had fallen by 10 per cent. in 1929-30, declined by a further 20 per cent. in 1930-31, and the general volume of employment fell to about 63 per cent.

During January, 1931, the exchange premium on transmission of funds to London rose from 8 per cent. to 30 per cent., where it remained until reduced to 25 per cent. in December, 1931.

Since the discontinuance of Government loan flotations both locally and abroad in 1929, construction of capital works on Government account had been progressively reduced and the unfavourable business outlook caused a suspension of practically all new investments on private account. Thus the value of new building permits in 1931 was less than one-tenth of the pre-depression total, and new company registrations in 1930 and 1931 were only a fraction of the totals for previous years. Sales of real estate decreased from £54,600,000 in 1929 to £26,100,000 in 1930 and to £13,700,000 in 1931. The value of shares on the Stock Exchange fell by approximately 50 per cent. between July, 1929, and August, 1931.

In certain other directions, however, the depression was not so marked. Deposits in trading banks declined by about 10 per cent., and, though during 1930 advances exceeded deposits, a more healthy relationship was established in 1931. Records of wholesale trade which became available in the latter half of 1930 indicated a fairly stable volume of turnover from that time to the close of 1931.

Fortunately, the output of primary production was bountiful and, though world values continued to decline, the large volume of exports, coupled with the exchange premium, prevented a further decrease in rural producers' returns from the export trade.

In June, 1931, a conference of Premiers in Canberra resolved to adopt the following measures for rehabilitation:—

- (a) A reduction of 20 per cent. in all adjustable Government expenditure, as compared with the year ending 30th June, 1930, including all emoluments, wages, salaries and pensions paid by the Governments, whether fixed by statute or otherwise, such reduction to be equitably effected.

- (b) Conversion of the internal debts of the Governments on the basis of a 22½ per cent. reduction of interest.
- (c) The securing of additional revenue by taxation, both Commonwealth and State.
- (d) A reduction of bank and savings bank rates of interest on deposits and advances.
- (e) Relief in respect of private mortgages.

Further measures taken to cope with the depression included (in the State sphere) a Moratorium Act, a Landlord and Tenant (Distress Abolition) Act, an increase in the scale of taxation for unemployment relief, and an Ejectments Postponement Act. As from 1st January, 1931, the forty-four-hour week was re-established as the standard working week within State jurisdiction. In the federal sphere there was an increase in rates of sales tax and primage duties, a wheat bounty was provided, and from 1st February, 1931, the Federal Arbitration Court ordered a reduction of 10 per cent. in wages over and above the cost of living adjustments. The living wage under State jurisdiction remained at £4 2s. 6d. per week.

#### 1931-32.

Two events of outstanding importance affected the trends of the year. By reason of the suspension of the gold standard by Great Britain in September, 1931, Australian exchanges depreciated further in terms of gold, and the continued fall in gold values of exports was nullified. Following upon the adoption of the Premiers' Plan in June, 1931, reductions were made in rates of public expenditure, all internal Government loans were converted into Commonwealth Consolidated Stock at a reduction of 22½ per cent. in interest rates, an Act was passed reducing rates of interest on private loans (other than overdrafts) and rents by 22½ per cent. Rates of interest allowed on savings bank deposits, fixed deposits in trading banks and on bank overdrafts, were progressively reduced by the authorities concerned.

Export prices and export income (Australian currency) continued at the low levels (about 40 per cent. below the average for 1925-29) to which they had fallen in 1930-31, and commercial and industrial activity remained stagnant, despite the existence of favourable seasonal conditions and a record volume of primary production. During the year the volume of unemployment, and the number of recipients of food relief increased to a maximum, but, though the average number of factory employees for the full year remained practically constant, monthly returns of employment in a representative group of the principal factories showed substantial increases between September, 1931, and March, 1932, especially in the iron and steel trades and textiles.

The general volume of business (as measured by bank clearings) continued to decline steadily, and investment (as measured by building operations, property sales, and loans on mortgage) was lifeless. In the nine months following the suspension of the gold standard by Great Britain in September, 1931, the value of shares on the Stock Exchange rose on the average by about 35 per cent.

The financial position of the State became extremely difficult. Revenue from all sources declined despite increased taxation, while heavy additional expenditure was required to sustain the unemployed. Although substantial

reductions were made in certain adjustable expenditure, an increasing deficiency developed in the public accounts. The issue of Treasury Bills as a means of supplementing cash resources was regulated by decisions of the Australian Loan Council, and the cash deficiency constantly tended to exceed the allotment.

Eventually the position became so acute that external interest charges due by the State were not met. The amounts were, however, paid by the Commonwealth Government and made recoverable by Commonwealth legislation, the enforcement of which was resisted by the State Government and ultimately led the Governor to change his advisers in May, 1932. Expenditure of the Commonwealth and State Governments both on revenue and loan accounts to amounts approved by the Australian Loan Council was financed by the issue of Treasury Bills, which were taken up by the Commonwealth Bank and the trading banks. The accommodation so provided for the State increased by £14,809,000 during the year ended 30th June, 1932.

During the year the basic rate for adjustment of Federal award wages in Sydney fell from £4 2s. 6d. per week to £3 16s. 6d. (less 10 per cent. in both cases), but the State living wage remained at £4 2s. 6d. The average rate of wages for adult males fell from £4 15s. 1d. to £4 12s. 6d.

In the State sphere there were amendments extending the scope of the moratorium, while several far-reaching bills passed by the Legislative Assembly failed to pass the Legislative Council.

The rate of oversea exchange remained on the basis of £130 Australian for £100 sterling between January and December, 1931, when a tendency to weakness developed, and the Commonwealth Bank, in exercise of its functions as a central bank, took control of the oversea exchanges by publicly announcing its willingness to buy sterling exchange at a premium of 25 per cent. This rate was maintained through the remainder of the year.

#### 1932-33.

The average level of export prices improved only slightly during 1932-33, but there was an increase in the volume of exports, resulting in a total increase of 7 per cent., in value of exports of merchandise. As the export season progressed this stimulated some improvement in the economic position. Concurrently, reductions were made in some Governmental charges, in rates of interest on overdrafts, and certain other debts. The basic wages used in varying Federal and State awards were brought to approximately the same level in August, when the latter was reduced from £4 2s. 6d. to £3 10s. The cumulative effect of these adjustments was to accelerate the fall in internal price levels. All factors combined to diminish in some degree the disparity between export prices and internal costs, the sudden advent of which had been the chief characteristic in the decline which had begun in the latter half of 1929 and continued with increasing severity until 1932. To this fact may be attributed a considerable part of the renewed confidence which manifested itself in some measure of business revival during the year, though certain other local factors and some improvement in the world position contributed.

The most general indicator of business activity—the index of bank clearings—increased from 62 per cent. of the 1926-1930 average in the early part of 1932 to 67 per cent. in June, 1933. As this index is based on money turnover, and it may be presumed that the average level of prices fell, the volume of business increased in rather greater degree. Industrial recovery

also occurred, and the number of factory employees increased by 10 per cent. and the value of imports rose from £(stg.) 18,800,000 in 1931-32 to £(stg.) 23,800,000 in 1932-33. The recorded value of goods sold at wholesale during the year increased by £8,400,000, or 7 per cent. On the other hand, the turnover of the principal city retail shops showed little or no increase, though it is probable that, allowing for a fall in prices, the volume of trade increased slightly. The number of employees in such shops increased by an average of 5 per cent. on the basis of the periods April to June in each year.

Railway passenger traffic increased during the year by 3 per cent. and goods traffic by 10 per cent. (largely on account of the increased volume of primary production). There was some recovery in motor transport; and the average weekly number of new cars put into use increased from 53 in June, 1932, to 90 in June, 1933.

Savings bank deposits rose during the year by £660,000, substantially less than the amount of interest added to depositors' accounts. Private deposits in private trading banks increased by £3,570,000, while advances remained practically unchanged. In consequence the ratio of private advances to private deposits decreased from the abnormal ratio of 101 per cent. in June quarter 1932, to 97 per cent. in June quarter, 1933.

Building activity revived, and the value of new building permits recorded increased from £1,782,000 in 1931-32 to £3,565,000 in 1932-33, the latter figure being about 20 per cent. of the pre-depression average. The value of real estate transferred increased from £12,300,000 in 1931-32 to £14,100,000 in 1932-33, but the amount of mortgages registered decreased from £11,300,000 in 1931-32 to £8,400,000 in 1932-33. The average prices of shares on the Stock Exchange increased by approximately 25 per cent., and the average redemption yield of interest on Government stocks decreased from £4 16s. per cent. to £3 15s. per cent. between June, 1932, and June, 1933. The rate of interest chargeable on Treasury Bills was reduced from 4 per cent. to 2½ per cent., and interest on fixed deposits in banks by ½ per cent., so that rates ruling for three months' deposits became 2 per cent. and on deposits for two years 3 per cent., as from February, 1933.

The volume of primary production, which had expanded with the onset of low prices, attained record dimensions during 1932-33, the output of the principal rural products, wool, wheat, and butter each exceeding by far the output of any previous year. Though seasonal conditions were favourable, this result was due in very large part to efforts of primary producers to regain by increased production part of the income which they had lost through decreased prices. The price of wool, however, remained at about the same level as during the two preceding seasons (8.5d. per lb., or approximately pre-war parity), while the prices of wheat and butter were both lower than 1931-32. At the close of the export season, prices of all three commodities had fallen almost to the lowest points recorded in the depression, but a marked improvement occurred in prices of wool in the middle of 1933. Some recovery in prices of wheat occurred a little later, but there was only a temporary recovery in butter markets.

On the whole, the year was one in which the many adjustments commenced in the preceding year were carried on and made more general. While there was little actual improvement in the external position, there was an appreciable measure of internal recovery due to adjustments. Owing to the rise in export prices in the middle of 1933, the financial year closed with more favourable indications for further recovery in 1933-34.

1933-34.

Wool prices continued to move upward until January, 1934, at which time approximately four-fifths of the clip had been sold, and although prices fell subsequently to their former low level the realisations almost reached pre-depression level. The prices of wheat and butter fluctuated considerably, but on the whole moved unfavourably, although local prices for the latter commodity were increased following upon an agreement under Federal and State statutory authority vesting export control beyond the territory of a State and local price fixation in duly constituted authorities. Wheat growers were again assisted from State and Commonwealth Treasuries pending receipt of a report from a Royal Commission appointed by the Federal Government to inquire into the position of wheat farmers throughout Australia and to recommend a scheme for rehabilitation of the industry.

There was a remarkable increase in business activity during the year, especially in building. The improvement was general throughout all branches of business, but in the last six months of 1933, permits were granted for the erection of buildings valued at £2,425,000, while in the first six months of 1934 the corresponding value was £3,746,000, the total being £2,600,000 in excess of the value of the preceding twelve months.

Trade, both overseas and internal, showed great expansion. Despite some lag in the export of wheat owing to the reluctance of farmers to accept the prevailing low prices, the increased value of wool caused exports to rise by £A6,650,000 to £A39,620,000 (excluding gold), while imports in sterling were £1,900,000 higher in value at £24,880,000. Notwithstanding further exemptions from sales tax, the value of taxable commodities sold at wholesale increased by £2,280,000, while retail sales in large city stores were 3 per cent. above last year's figures, indicating (in view of the lower prices) a much greater volume of business.

Bank clearings (excluding Treasury bill transactions) amounted to £700,000,000 as against £616,500,000 in the previous year, while private deposits in trading banks rose from £94,747,000 in June, 1933, to £105,142,000 a year later. Advances decreased during the same period from £92,144,000 to £91,414,000, the ratio of private advances to private deposits being 87 per cent. Deposits in savings banks, £75,700,000 at 30th June, 1934, were greater by £3,400,000.

Real estate, particularly sites favourably situated for business purposes, recovered somewhat in value, and transactions were more numerous and greater in amount. Sales to the value of nearly £18,000,000 were recorded during the year.

The average number of hands employed in factories increased from 138,500 to 154,000, and the value of the output from £124,450,000 to £136,610,000.

Following the general revival of business and the repeal of the law which obliged employers to pay contributions in respect of family endowment, a number of companies were enabled to increase the rate of dividend payable or to resume payment of dividends. The stock exchange quotations reflected the prevailing optimism and moved uninterruptedly upward. Share values as measured by the quotations concerning seventy-five miscellaneous companies increased by 20 per cent. during the twelve months, and represented 42 per cent. above par value as against 26 per cent. below par in September, 1931.

A further satisfactory feature was the revival of investment in mortgage loans on both urban and rural properties. The return on 4 per cent. Government loans, including redemption, had fallen from 3.75 per cent. to 3.45 per cent. during the year; while bankers' rates for fixed deposits at two years fell to  $2\frac{1}{2}$  per cent. Under such conditions, a fall in mortgage rates was inevitable; large amounts became available at  $4\frac{1}{2}$  per cent., and 80 per cent. of the total amount advanced on first mortgage in June, 1934, was at rates not exceeding  $5\frac{1}{2}$  per cent. Bank overdraft rates were from  $4\frac{1}{2}$  per cent. to  $5\frac{1}{2}$  per cent. in June, 1934, and the upper limit was reduced to 5 per cent. in the following month.

The discount rates on Treasury Bills was reduced from  $2\frac{3}{4}$  per cent. to  $2\frac{1}{2}$  per cent. in June, 1933, and in April, 1934, to  $2\frac{1}{4}$  per cent. As the short term local loans of New South Wales had increased to £29,190,000 during the twelve months ending June, 1934, the relief thus afforded to the State Treasury, combined with that arising from the favourable conversion of oversea loans, was helpful in reducing the State deficit for the year to £3,208,000 as compared with £3,759,000 in the preceding year. Reductions were made in taxation, *e.g.*, the discontinuance of contributions by employers in respect of family endowment without alteration of the benefits; the reduction in rates of income tax on companies by 3d. in the £ (in the case of mutual life assurance companies by 6d. in the £1); and the reductions in rates of the special income tax and wages tax and in certain stamp duties.

Unemployment was reduced appreciably, and its stress was relieved by the extension of the system under which part time employment was provided on public works. Wages and cost of living remained fairly stable.

A most important change in the constitution was effected in April, 1934, when a new Legislative Council was constituted by proclamation following a referendum.

#### 1934-1935.

The process of economic recovery continued in 1934-35, though the recession in prices of wool, which began in January, 1934, proved to be almost as rapid as the previous year's advance had been, and prices of wheat and butter in oversea markets remained low. There was some compensation in a larger volume of exports and in better market conditions for meat, tallow and other minor items of trade, but the aggregate value of oversea exports from New South Wales fell from £A42,200,000 to £A37,700,000.

In contrast, there was a marked increase in imports from £A32,300,000 to £A40,900,000. Nevertheless, funds accumulated abroad from the realisation of exports of earlier years were sufficient to meet the adverse balance of payments, as well as the requirements of a large number of tourists travelling to Great Britain for the celebration of the Jubilee of the King's accession.

Public accounts for the year 1934-35 showed further progress towards balance. Revenue was buoyant and expenditure almost stationary, so that the deficit was reduced from £3,208,000 to £2,299,000, of which £1,860,000 represented payments to sinking fund in reduction of public debt. Improvement was disclosed by the accounts of the various State business undertakings, notwithstanding reductions in charges, fares and freights.

Seasonal conditions were variable. The rainfall was generally sufficient in the spring and early summer. Then there occurred periods of dry weather, which caused crops and flocks to deteriorate in some districts, but serviceable rains brought relief before serious drought conditions developed.

The wool sales proceeded steadily though the fall in prices continued until the selling season had practically closed. Contrary to the usual experience, prices of sheep did not decline owing to a brisk demand for the export trade in meat. The wheat crop was smaller than in recent years, and the market conditions were not attractive. Consequently, there was a substantial carry-over, and sellers were able to take advantage of the higher prices prevailing later in the year. For the fourth season in succession wheat farmers were assisted by Government bounty, and it was decided that this form of relief should be replaced by an organised system of marketing similar to the butter stabilisation plan.

The volume of dairy production was heavy until the winter months, when the output diminished beyond the normal seasonal movement on account of dry weather. Nevertheless, the total production of butter was not far below the peak of 1933-34, and farmers obtained a better price per unit of cream supplied to butter factories.

At the close of the year prices of the principal rural products were trending upwards and, as costs of production, transport, interest, etc., had been to some extent adjusted to lower prices, the outlook further improved during the year.

The amount of fixed deposits in private accounts in private trading banks was lower in June quarter, 1935, by £5,000,000 than in the corresponding quarter of 1934; deposits not bearing interest were higher by £1,250,000. Meanwhile advances increased by £7,300,000, and the ratio of advances to deposits rose from 87 per cent. to 97 per cent. The decline in fixed deposits was largely consequent upon increased earnings of public companies and enterprises and reductions in rates of interest on fixed deposits. The average rates of interest on first mortgage loans on rural securities declined from 5 per cent. to  $4\frac{1}{2}$  per cent. during 1934-35, and the Commonwealth Government floated a loan in November, 1934, on terms which were the lowest ever offered for a Federal loan in Australia, viz., interest at 3 per cent. with issue price slightly below par and a redemption yield of £3 0s. 5d.

With a plentiful supply of funds available for investment, competition for good securities on the Stock Exchange intensified when rates of interest on bank deposits and the yield on Government securities declined and the dividend position of the companies was gaining strength. Consequently, the index of share values rose month by month.

There was further substantial increase in property investment; sales of real estate rose by 47 per cent., viz., from £18,000,000 to £26,400,000, and registered mortgages on real estate from £12,000,000 to £16,600,000.

Expansion in building was accelerated, and the estimated cost of building plans for which permits were sought in the metropolis and country towns increased from £6,172,000 in 1933-34 to £10,822,000, the latter figure being five times the corresponding value in 1931. The plans in 1934-35 included nearly £6,000,000 for new dwellings and £1,800,000 for new business premises.

The turnover in wholesale and retail distributing trades was greater in each month, July, 1934, to June, 1935, than in the corresponding month a year earlier, and employment in retail stores increased by  $7\frac{1}{2}$  per cent. during the year.

There was not the same degree of expansion in bank clearings as in other activities, as they were affected by the lower value of exports. For instance, by a decline in the value of wool sold at Sydney auctions—from £22,000,000 in 1933-34 to £15,350,000 in 1934-35. Nevertheless there was an increase in interbank settlements from £700,000,000 to £726,000,000 (Treasury Bill transactions being excluded).

The revival in the import trade, noted above, was concurrent with increasing activity in local factories and by June, 1935, employment in factories was approaching the peak of the pre-depression year. Establishments engaged in the production of industrial metals and machinery were exceptionally busy, and the output of iron and steel for oversea export, as well as for use in Australia, outstripped former records.

A measure of the extent of economic recovery during the last two years may be found in an employment index compiled in 1935 for the first time. It indicated that the number of persons in employment (apart from working proprietors and persons engaged on their own account) increased from 594,000 in June, 1933 (when the last census was taken) to 640,000 in June, 1934, and 695,000 in June, 1935. The progressive decline in unemployment continued during the year, the proportion of unemployment decreasing from 19.5 per cent. in June, 1934, to 14.1 per cent. in June, 1935.

Retail prices and costs of living were remarkably steady throughout the year, and there was little change in rates of wages beyond an increase from 67s. 6d. to 68s. 6d. in the living wage declared by the State industrial tribunal.

#### 1935-36.

The year opened auspiciously. There was widespread evidence that confidence was returning. Gains of the past two or three years were being consolidated on a broader basis and there was a general revival of business enterprise.

Seasonal conditions were not entirely favourable for rural production. Periods of dry weather throughout the year caused the volume of production to recede slightly from the high level of recent seasons, though improved prices for staple products offset any shrinkage in quantity. The value of the wool clip alone was higher by about £7,700,000 than in 1934-35.

Activity in the building trade continued, and the value of projects for which permits were issued in the metropolis and country towns increased by £3,000,000 to £13,700,000; recorded sales by wholesale traders rose from £143,000,000 to £157,500,000, notwithstanding a reduction in the field covered by the records; registered motor vehicles increased from 244,400 in June, 1935, to 265,000 in June, 1936.

The import trade, which had grown in 1934-35 under the stimulus of the high realisations of the previous year's exports, expanded steadily, showing no reaction to the subsequent decline in the value of exports. The incoming trade in each month of 1935-36 exceeded that of the corresponding month of the two previous years, and the total value of imports of merchandise during the year, viz., £34,730,000, was greater by £10,000,000 stg. than in 1933-34.

As a result of greater activity in business and the sustained buoyancy of the import trade, the demand for financial accommodation gathered strength and bank advances expanded, the June quarter average of private advances by the trading banks being £98,700,000 in 1935 and £102,600,000 in 1936. On the other hand, fixed deposits began to shrink as funds flowed into avenues of investment which yielded a higher return than bank rates of interest.

While these trends indicate that greater use was being made of available moneys, they led to a hardening of interest rates, and in March, 1936, the trading banks began to offer higher interest for deposits—the first reversal of the downward movement in their rates, which had persisted since June, 1931. In adopting this policy the banks appear to have been influenced by misgivings that a boom was developing, to be followed by an inevitable reaction, or that the rising tide of imports would absorb moneys required to meet obligations oversea. The export season, however, proved more favourable than anticipated, and the net surplus of merchandise exported from the Commonwealth grew from £5,500,000 stg. for the six months July-December, 1935, to £13,900,000 for the twelve months ended June, 1936. The total excess of exports, including gold (mainly local production), was £22,600,000.

Retail prices and wages were fairly stable during the year, and the volume of employment continued to improve steadily. The actual number of workers in factories surpassed the number in the pre-depression year, though relatively to the population it did not quite reach the peak. Increasing numbers were absorbed in other classes of employment, and, on the whole, the number of persons in employment is estimated to have grown to 742,000 in June, 1936, as compared with 695,000 twelve months earlier and 594,000 in June, 1933. There still remained, however, a large number of persons dependent upon unemployment relief for sustenance, pointing to the necessity for measures which would induce the gradual diversion of the able-bodied men from part-time relief work of more or less eleemosynary nature to productive employment.

Towards the end of May, 1936, events relating to international trade overshadowed other aspects of the national economy. The Government of the Commonwealth introduced drastic changes into the Australian trade policy with the threefold object of encouraging the local production of certain goods (notably motor chassis), of fostering trade within the Empire and, on the principle of reciprocity, of diverting the import trade in some commodities from present sources of supply, where these countries do not purchase Australian products.

#### 1936-37.

During the year 1936-37 the national income of New South Wales and the value of production from its principal industries, continuing a rise that had extended over six years, reached the approximate level of pre-depression years. At the same time unemployment fell to 6.5 per cent. in June, 1937, and the Budget showed a small surplus after providing a substantial contribution to sinking fund.

Though the level of internal prices continued to rise steadily, the upward movement of costs was slower than the growth of incomes and the effective purchasing power of national income per head of population was slightly greater than in 1928-29. Building and investment expanded steadily and the stock exchange maintained a buoyant tone.

One of the notable developments in a year of general improvement was the pronounced and sustained rise in prices of wheat. Combined with increased production, this not only restored the incomes of a large section of hitherto necessitous rural producers, but relieved Governments of an item of expense which had seemed likely to become a permanent feature of the Budget.

Despite forebodings as to the effect of the dispute affecting oversea trade, wool prices were maintained at the opening sales in the spring of 1936 and, later, with the re-entry of Japanese buyers into the market, moved upward to realise an average price of 18.5d. per lb. in January, 1937—a value not attained since 1928. As the prices of industrial metals also moved to much higher levels, there was general prosperity throughout all the main primary industries except dairying, which suffered both from decreased production, due to an unfavourable season, and unremunerative export prices for butter. This industry, together with the smaller industries of fruit growing and poultry farming, were the principal exceptions to otherwise satisfactory conditions.

The favourable position of primary industries provided fresh stimulus to secondary industries and to commercial and industrial activity generally, producing a degree of recovery which, by the middle of 1937, approximated to normal conditions. The proportion of wage earners in employment increased from 89.3 per cent. in June, 1936, to 93.5 per cent. in June, 1937; the number of factory employees increased from 199,200 to 216,200 during the same period; the value of buildings for whose erection permits were granted in the metropolitan area rose from £9,385,000 in 1935-36 to £10,174,000 in 1936-37, and in country towns from £3,744,000 to £4,343,000; the value of sales at wholesale by traders registered under the Sales Tax Acts increased from £157,500,000 to £176,500,000; retail trade showed an increase of approximately 5 per cent. over all sections, and the consumption of electricity and gas increased by 4 per cent.

Progressive improvement in the budgetary position resulted in the first surplus recorded for ten years and the State's loan expenditure on works and services decreased from £9,491,108 in 1935-36 to £8,028,968 in 1936-37. As a result of the favourable condition of State finances the salaries of employees of the Crown were restored in full from the 1st July, 1937. Emergency reductions in Widow's Pensions were restored, and emergency taxation (Wages Tax and Special Income Tax) was further reduced in 1937-38.

With the favourable position of State finances and the diminution of unemployment, the Food Relief system was converted into a comprehensive scheme of Social Aid for persons in need and Emergency Relief Works were progressively converted into either full time or rationed relief works. An Employment Council was set up, to undertake the training of unskilled workers and to deal with the special problem of the residual unemployed youths and young men.

With the improvement in market conditions and prospects for the major rural industries, proposals were revived for closer settlement based, primarily, on voluntary subdivision of holdings in districts with reliable rainfall suitable for mixed farming.

In the early part of 1937 there was a rapid growth in the building society movement, many new societies being formed in the metropolis and in country districts. These were assisted by an Advisory Committee, and

the funds which they borrowed to finance members were backed by Government guarantee. Following upon a report by the Board constituted under the Housing Act, steps were taken towards slum clearance.

An upward movement in retail prices and rents led to small increases in the living wage (State), which moved from 69s. per week in April, 1936, to 71s. 6d. in April, 1937, and in the Federal basic wage (Sydney) from 70s. per week in December, 1936, to 72s. in June, 1937. In June, 1937, the Federal Arbitration Court, after inquiry, decided that there should be a loading addition of 6s. per week to the basic wages applicable under Federal awards in New South Wales and action was taken to substitute the Federal basic wage system for the living wage system of the State Industrial Commission.

The year closed with economic conditions generally buoyant, with the productive resources of the community approaching closely to full employment, and with every indication of a transition to higher internal price-cost levels in the year 1937-38.

## COMMERCE.

**POWER** to make laws with respect to trade and commerce with other countries and between the States of Australia is vested in the Commonwealth Parliament.

The first Federal Act relating to customs came into operation by proclamation on 4th October, 1901. The Act, with amendments, provides administrative machinery in relation to customs, prescribes the manner in which duties are to be computed and paid, and authorises the inspection of imports and exports.

Prior to federation a different tariff was in operation in each State, and interstate trade was subject to the same duties as overseas trade. On 8th October, 1901, when the Customs Tariff Act of 1902 was introduced in the Federal Parliament, a uniform tariff for all the States was imposed, trade and commerce between the States became free, and the power of the Commonwealth to impose duties of customs and excise became exclusive, except that the State of Western Australia was given the right to levy duty on interstate imports for a period of five years.

By the Customs Act certain imports are prohibited, and the prohibition may be extended by proclamation to other commodities. The conditions under which goods for export are prepared may be prescribed by regulation, and the exportation of goods which do not conform to the required standards may be prohibited. In terms of the Commerce (Trade Descriptions) Act, 1905-1933, the importation or exportation of any goods may be prohibited by regulation unless they bear a prescribed trade description.

Matters relating to trade and customs are administered by the Federal Department of Trade and Customs which is under the direction of a Minister of the Crown. For the assistance of the Minister a Tariff Board has been appointed under an Act which came into operation in March, 1922. The Board consists of four members, including an administrative officer of the Department of Trade and Customs, who is chairman. The Act prescribes that the Minister shall refer to the Board for investigation such matters as appeals against the decisions of the Comptroller-General in respect of the interpretation of the tariff; the necessity for new or increased or reduced duties, or for bounties; the effect of bounties; proposals for applying preferential tariffs to any country; and complaints that a manufacturer is taking undue advantage of the protection afforded by the tariff to charge unnecessarily high prices. In addition, the Minister may refer to the Board for inquiry any questions regarding the classification of goods under by-law items in the tariff or the value for duty of goods, and he may request them to report as to the effect of the customs and excise tariffs and of the customs laws on the industries of the Commonwealth, and on other matters affecting the encouragement of industries in relation to the tariff.

Certain inquiries conducted by the Tariff Board must be held in public, *e.g.*, those relating to revision of the tariff, to proposals for bounties, or to complaints that a manufacturer is taking undue advantage of the protection afforded by the tariff, but evidence of a confidential nature may be taken in private.

The Commonwealth Department of Commerce was established as the Department of Markets in 1924 to supervise matters relating to the overseas marketing of Australian produce. Its functions include the collection and

dissemination of commercial and industrial data, the supervision of the grade and quality of goods exported, the investigation of matters affecting trade, commerce, and industry, and the control of the Trade Commissioner service abroad. The department is under the control of a Minister of the Crown.

Under the Commerce (Trade Descriptions) Act official control is exercised over the preparation, manufacture, quality, grading, packing and labelling of practically all foodstuffs exported, by a number of specially trained officers who examine the goods either during the course of preparation or prior to exportation.

The distribution abroad of Australian butter and cheese, dried vine fruits, canned fruits, wine and meat is regulated by marketing organisations vested with statutory powers by the Federal Parliament. The statutory boards are the Australian Dairy Produce Board, the Dried Fruits Control Board, the Canned Fruits Control Board, the Wine Overseas Marketing Board and the Australian Meat Board. Control by such boards is exercised by means of a licence issued to exporters under which they are required to sell the goods in overseas markets under such restrictions and conditions as the marketing authorities in Australia prescribe. For some primary products assistance has been given by the Government of the Commonwealth in the form of bounties payable on export. Details on these matters are given in the appropriate chapters of this Year Book.

Trade representation abroad is conducted by Trade Commissioners who have been appointed for service in China, Japan, the Netherlands East Indies, Canada and New Zealand. The work in London is undertaken by the High Commissioner for Australia, and an officer under his control is stationed in Paris. In America representation is by an Official Secretary stationed in New York.

At the beginning of 1934 the Government of New South Wales appointed a representative in London.

#### STATISTICS OF IMPORTS AND EXPORTS.

Statistics relating to the overseas trade of the various States of Australia are recorded by the Federal Department of Trade and Customs. The records of imports as shown in this chapter include those re-exported for consumption in other States or elsewhere. Exports classified as "Australian Produce" include products of other Australian States which have been shipped overseas at ports in New South Wales, but they do not include products of New South Wales despatched abroad from ports in other States.

Complete records of interstate trade have not been available since 12th September, 1910, when the Customs Department ceased to record them. Therefore, the figures in this chapter, except those on pages 873 and 874, are exclusive of the large volume of interstate trade, and do not represent the total external trade of New South Wales.

#### OVERSEA TRADE.

The values, as shown in the following tables relating to goods imported and exported overseas, are based on the values recorded by the Department of Trade and Customs. In the records *the value of goods imported* represents the amount on which duty is payable or would be payable if the duty were *ad valorem*, such value being the sum of the following:—(a) The actual price paid by the Australian importer plus any discount or other special deduction, or the current domestic value

in the country of export at the date of exportation, whichever is the higher; (b) all charges for placing the goods free on board at the port of export; and (c) 10 per cent. of the amounts (a) and (b).

As from 1st July, 1937, the following values have been adopted for exports:—

- (1) Goods sold to overseas buyers before export—the f.o.b. equivalent of the price at which the goods were sold, e.g., as regards wool, the actual price paid by the overseas buyer plus the cost of all services incurred by him in placing the wool on board ship.
- (2) Goods shipped on consignment—the Australian f.o.b. equivalent of the current price offering for similar goods in the principal markets of the country to which the goods were dispatched for sale. As regards wool the f.o.b. equivalent of the current price ruling in Australia will normally provide a sufficient approximation to the f.o.b. equivalent of the price ultimately received.

Values include the cost of containers.

Until 30th June, 1937, the value of goods exported was assessed upon the basis of their value in the principal markets of New South Wales, except for certain commodities which are referred to below.

Since 1st July, 1929, *sugar* sold in New South Wales for export has been valued at the f.o.b. price at which it was sold to overseas buyers, and that shipped on consignment at the f.o.b. equivalent of prices ruling in the London markets. Also goods on which bounty or rebate was payable on export have been assessed at their market value in New South Wales less the amount of the bounty or rebate.

Since 1st July, 1929, *wool* sold in New South Wales for export has been valued at the actual price paid plus the cost of placing it on board ship, and that shipped on consignment at the f.o.b. equivalent of prices ruling in New South Wales.

Since 1st July, 1932, *wheat* sold in New South Wales for export has been valued at the f.o.b. equivalent of the price at which it was sold, and that shipped on consignment at the f.o.b. equivalent of current selling price overseas.

Since 1st April, 1934, *butter* sold in New South Wales for export has been valued at the f.o.b. equivalent of the price at which it was sold, and that shipped on consignment at the f.o.b. equivalent of the current ruling price overseas. These prices, however, were adjusted from time to time on the basis of information received from the Australian Dairy Produce Export Board.

Since 1st July, 1934, *flour* sold in New South Wales for export has been valued at the f.o.b. equivalent of the price at which the flour was sold, and that shipped on consignment at the f.o.b. equivalent of prices ruling in New South Wales.

The value of imports is recorded in the currency of the United Kingdom, and the value of exports in Australian currency. Owing to the operation of abnormally high rates of exchange since 1930, the values for the last seven years are shown in both Australian and British currencies. Rates of exchange, Australia on London, as shown in the chapter of this volume entitled *Private Finance*, illustrate the variations in the relation between these currencies.

The total value of overseas imports and exports, as recorded by the Customs Department, during various years since 1901 is shown in the following

table, with the value per head of population. The figures, with the exception of those relating to the year 1901, do not include the value of exports in the form of ships' stores.

Year ended 30th June.	Overseas Imports.	Overseas Exports.			Total Trade Overseas.
		Australian Produce.	Other Produce.	Total.	

<i>Australian Currency Values.</i>					
	£	£	£	£	£
1901*	17,560,207	†	†	18,210,627	35,770,834
1911*	27,343,428	29,938,415	2,222,986	32,161,401	59,504,829
1921	72,466,388	48,302,717	4,299,089	52,601,806	125,068,194
1926	64,009,919	51,565,742	2,436,072	54,001,814	118,011,733
1929	63,491,123	47,170,407	2,118,483	49,288,890	112,780,013
1930	57,129,636	33,877,534	1,884,273	35,761,807	92,891,443
1931	29,817,013	30,346,929	1,517,998	31,864,927	61,681,940
1932	23,948,174	33,147,646	1,549,907	34,697,553	58,645,727
1933	29,848,732	44,518,406	2,094,381	46,612,787	76,461,519
1934	32,264,818	39,909,246	2,332,759	42,242,005	74,506,823
1935	40,897,621	35,167,572	2,561,600	37,729,232	78,626,853
1936	45,378,652	44,640,164	2,892,036	47,532,200	92,910,852
1937	51,297,217	53,920,115	3,382,397	57,302,512	108,599,729

<i>British Currency Values.</i>					
1931	26,311,411	25,745,092	1,276,732	27,021,824	53,333,235
1932	18,797,584	26,058,705	1,223,590	27,282,295	46,079,879
1933	23,831,322	35,562,879	1,674,017	37,236,896	61,068,218
1934	25,760,333	31,865,651	1,864,927	33,730,578	59,490,911
1935	32,652,791	28,079,600	2,047,865	30,127,465	62,780,256
1936	36,230,461	35,645,707	2,311,909	37,957,616	74,188,077
1937	40,955,861	43,055,759	2,703,793	45,759,552	86,715,413

PER HEAD OF POPULATION.					
<i>Australian Currency Values.</i>					
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1901*	12 16 11	†	†	13 6 6	26 3 5
1911*	16 8 5	17 19 7	1 6 8	19 6 3	35 14 8
1921	34 13 4	23 2 2	2 1 1	25 3 3	59 16 7
1926	27 11 9	22 4 6	1 1 0	23 5 6	50 17 3
1929	25 11 3	18 19 9	0 17 1	19 16 10	45 8 1
1930	22 13 7	13 9 0	0 15 0	14 4 0	36 17 7
1931	11 14 3	11 18 6	0 12 0	12 10 6	24 4 9
1932	9 6 6	12 18 2	0 12 1	13 10 3	22 16 9
1933	11 10 5	17 3 7	0 16 2	17 19 9	29 10 2
1934	12 6 11	15 5 5	0 17 10	16 3 3	28 10 2
1935	15 10 6	13 7 0	0 19 5	14 6 5	29 16 11
1936	17 1 8	16 16 1	1 1 9	17 17 10	34 19 6
1937	19 2 9	20 2 3	1 5 3	21 7 6	40 10 3

<i>British Currency Values.</i>					
1931	10 6 10	10 2 3	0 10 1	10 12 4	20 19 2
1932	7 6 5	10 3 0	0 9 6	10 12 6	17 18 11
1933	9 4 0	13 14 5	0 12 11	14 7 4	23 11 4
1934	9 17 2	12 3 11	0 14 3	12 18 2	22 15 4
1935	12 7 11	10 13 3	0 15 6	11 8 9	23 16 8
1936	13 12 9	13 8 4	0 17 5	14 5 9	27 18 6
1937	15 5 6	16 1 3	1 0 2	17 1 5	32 6 11

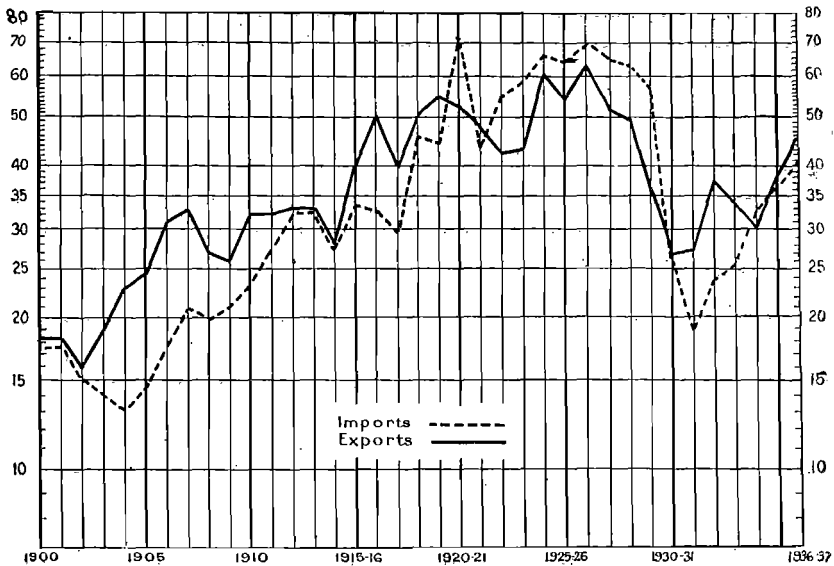
\* Year ended 31st December.

† Not available.

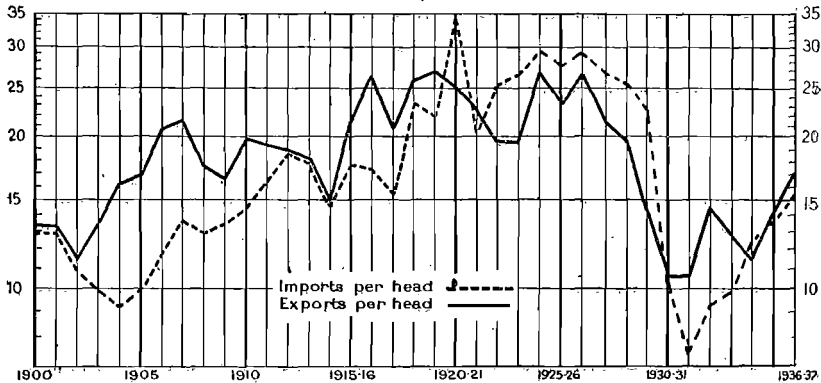
The increase in the aggregate value of trade during the decennium 1901 to 1911 was the result of industrial expansion, and the increase in trade between 1911 and 1921 was due in a large measure to enhanced prices.

In 1920-21 the value of imports was abnormally high, as a result of the prompt despatch of goods ordered abroad during the post war period of trade expansion, in anticipation of a curtailment of quantity and protracted delivery. After a decline in the following year the value rose rapidly and remained at a high level for several years.

**OVERSEA TRADE, 1900 TO 1936-37.**  
Ratio Graph.



**OVERSEA TRADE PER HEAD OF POPULATION, 1900 TO 1936-37.**  
Ratio Graph.



The diagrams are ratio graphs. The vertical scale of each graph is logarithmic, and the curves rise and fall according to the percentage of increase or decrease. Actual values are shown by means of the numbers at the side of the graphs.

In 1929-30 there was a decline of about 10 per cent., followed by successive falls of 54 per cent. in 1930-31 and 29 per cent. in 1931-32, when the value (in British currency) was less than 30 per cent. of the value in 1928-29. This rapid decrease followed upon measures taken to discourage importations in view of the effects of an adverse trade balance upon economic conditions in Australia, though it was due in part to a fall in prices of the goods imported.

In 1932-33 there was an increase of 27 per cent., and the value in British currency was £5,000,000 greater than in the preceding year, and a further increase of £1,900,000 in 1933-34 brought the value almost back to the figure for 1930-31. The following years showed marked increases; the total for 1936-37 reached £40,955,861 exceeding that for 1930-31 by more than £14,600,000.

The bulk of the exports are products of the rural industries, and the quantities available for export vary with seasonal conditions. Between 1901 and 1911 the value of exports, increasing with production, rose by 77 per cent. During the following decade the industries suffered severely by reason of drought and war, which caused a diminution in production, but the value of exports continued to rise under the influence of higher prices. From 1924-25 to 1928-29 the value was maintained at a high level, though a downward trend was evident towards the close of this period.

In 1929-30 there was a decline from £43,289,000 to £35,762,000, due mainly to a fall in prices. The value of wool declined by £11,000,000, wheat and flour by nearly £5,000,000, and skins and hides by £1,500,000, while the exports of gold amounted to £4,000,000, as compared with £206,000 in the previous year.

In 1930-31 there was a further decline of £3,900,000 and the value was the lowest since 1914-15, notwithstanding an increase of nearly £3,500,000 in the wheat and flour trade. Wool declined by £2,000,000, skins and hides by nearly £1,500,000, and bullion and specie by £2,600,000. These figures show values of exports in Australian currency which was depreciated in relation to sterling during the year, so that the value of exports in British currency was only £27,000,000, which is lower by £8,740,000 than in 1929-30.

The volume of exports of staple products was very large in 1931-32, and, notwithstanding a decline in prices, the total value in British currency was £260,000 in excess of the corresponding value in 1930-31. The increase in value, according to Australian currency, which had depreciated further during the year, was over £2,800,000.

The general level of prices remained low throughout 1932-33 and the increase of £12,000,000 (Australian currency) in exports consisted of an addition of £2,000,000 to the export value of wool, and £10,000,000 bullion and specie. A rise in prices caused the value of exports of wool to increase by £8,000,000 in 1933-34 and the value of meat, hides and butter to increase by £1,400,000. On the other hand there was a decline of £3,500,000 in wheat and flour and of £11,000,000 in bullion and specie.

In 1934-35 the exports were valued at £37,729,232, a decrease during the twelve months of over £4,500,000, due to the fall in the prices of wool. The export of this commodity amounted to £16,719,987, as against £24,235,820 for 1933-34, a decline of over £7,500,000, which was offset to some extent by the following increases in exports, viz., wheat, £839,000; flour, £526,000; fruit, £194,000; frozen meats, £295,000; tallow, £173,000; and bullion and specie, £24,000. The total exports in 1935-36 amounted to £47,532,200, an increase during the year of £9,802,968. Commodities which showed increases were—flour and wheat, £1,721,000; wool, £5,394,000; hides and skins, £1,056,000; lead, £487,000; and bullion and specie, £2,086,000. There were decreases in butter, eggs and cheese, £651,000; bran, pollard and sharps, £166,000; frozen meat, including rabbits, £429,000; tallow, £121,000; and tin ingots, £102,000. In 1936-37 the total exports amounted to £57,302,512 an increase of £9,770,312 on the previous year. Items which contributed to this increase were: Wool, £5,524,000; eggs in shell, £58,487; biscuits, £9,652; wheat, £1,157,477; flour, £188,195; bran, pollard and sharps, £46,240; rice, £43,238; fruit, £73,412; frozen meat, including

rabbits, £359,969; hides and skins, £432,399; leather, £168,591; gelatine and glue, £13,894; tallow, £25,309; coal, £24,853; lead (pig), £237,247; iron and steel, £274,503; undressed timber, £106,428, and bullion and specie, £530,966. There were decreases in butter, £516,678; cheese, £2,680; and milk, cream, and milk foods, £35,782.

Quoted in sterling, the value of exports in 1930-31 and 1931-32 was approximately £27,000,000, and rose above £37,000,000 in 1932-33. It declined in each of the following years, and amounted approximately to £30,000,000 in 1934-35, £38,000,000 in 1935-36 and £45,800,000 in 1936-37. On the average the addition to the sterling value of exports arising from the premium on oversea exchange was nearly 18 per cent. in 1930-31, 27 per cent. in 1931-32, and 25 per cent. since 1932-33. An index of the volume of exports 1920-21 to 1936-37 is shown on pages 861 and 862.

The monthly movement of imports and exports—bullion and specie excluded—from July, 1932, to June, 1937, is illustrated in the following table:—

Month.	Imports. (Merchandise.)					Exports. (Merchandise.)				
	1932	1933	1934	1935	1936	1932	1933	1934.	1935.	1936
	1933.	1934.	1935.	1936.	1937.	1933.	1934.	1935.	1936.	1937.

*Australian Currency Values.*

	£ 000.	£ 000.	£ 000.	£ 000.	£ 000.	£ 000.	£ 000.	£ 000.	£ 000.	£ 000.
July ...	2,243	2,214	2,856	3,497	4,331	1,188	1,899	1,298	1,995	1,738
August ...	2,850	2,709	3,731	3,794	4,023	1,227	1,939	1,760	2,090	1,873
September ...	2,500	2,411	3,361	3,517	3,801	3,209	4,414	2,193	3,171	3,502
October ...	2,513	2,517	3,394	3,817	4,113	3,414	4,175	3,780	4,366	4,659
November ...	2,594	2,581	3,217	3,533	4,134	3,311	5,871	3,713	5,243	5,501
December ...	2,292	2,238	2,912	3,461	3,808	3,670	3,839	3,316	4,794	6,331
January ...	2,688	2,837	3,534	4,153	4,293	3,333	5,377	3,107	3,838	3,982
February ...	2,010	2,385	2,762	3,253	3,347	3,940	3,858	3,933	5,170	6,408
March ...	2,269	2,570	3,963	3,799	4,286	3,884	3,514	2,708	5,253	5,459
April ...	2,146	2,556	2,780	3,394	4,346	2,054	1,596	3,754	2,123	5,158
May ...	2,288	2,793	3,325	3,816	3,727	1,941	1,475	2,351	2,373	4,282
June ...	2,390	3,125	3,195	3,474	4,964	1,739	1,405	2,975	2,127	2,889
	28,783	30,936	39,030	43,508	49,173	32,910	39,362	34,826	42,543	51,782

*British Currency Values.*

	1,791	1,767	2,280	2,792	3,458	949	1,516	1,036	1,593	1,388
July ...	1,791	1,767	2,280	2,792	3,458	949	1,516	1,036	1,593	1,388
August ...	2,276	2,163	2,979	3,029	3,212	980	1,548	1,358	1,669	1,495
September ...	1,996	1,925	2,684	2,808	3,035	2,562	3,524	1,751	2,532	2,796
October ...	2,006	2,010	2,710	3,047	3,284	2,725	3,334	3,018	3,485	3,720
November ...	2,071	2,061	2,568	2,820	3,301	2,643	4,688	2,964	4,186	4,392
December ...	1,830	1,787	2,325	2,764	3,040	2,930	3,065	2,648	3,827	5,055
January ...	2,146	2,265	2,821	3,316	3,427	2,661	4,293	2,480	3,064	3,179
February ...	1,605	1,804	2,205	2,598	2,672	3,146	3,080	3,140	4,128	5,116
March ...	1,812	2,052	3,164	3,033	3,422	3,101	2,806	2,160	4,194	4,359
April ...	1,713	2,041	2,220	2,710	3,470	1,640	1,274	2,998	1,695	4,118
May ...	1,827	2,229	2,655	3,047	2,976	1,550	1,778	1,877	1,895	3,419
June ...	1,908	2,495	2,551	2,773	3,963	1,388	1,121	2,375	1,698	2,306
	22,981	24,699	31,162	34,737	39,260	26,275	31,427	27,805	33,966	41,343

The volume of exports is greater during the months September to March than in the other months. It rises after the opening of the wool sales in August or September, and becomes more active as the wheat arrives at the seaboard and the production of butter expands. As a general rule the inflow of imports is fairly even throughout the year.

## MOVEMENT OF GOLD.

The annual values of imports and exports shown on page 846 include consignments of bullion and specie (mainly gold), which in some years were very large, e.g., the exports of 1926-27 and 1932-33. These consignments are to be regarded as relating to the trade of the Commonwealth rather than of New South Wales—even the gold of current production, because only a very small proportion of the Australian output is produced in this State.

In the following statement of oversea trade, imports and exports of bullion and specie are distinguished from those of other commodities:—

Year ended 30th June.	Imports.			Exports.						
	Mer- chandise.	Bullion and Specie.	All Imports.	Merchandise.			Bullion and Specie.			All Exports
				Austra- lian Pro- duce.	Other.	Total.	Austra- lian Pro- duce.	Other.	Total.	
£000	£000	£000	£000	£000	£000	£000	£000	£000	£000	
Australian Currency Values.										
1911*	26,089	1,254	27,343	26,057	1,126	27,783	3,281	1,097	4,378	32,161
1921 ...	72,437	29	72,466	44,533	4,284	48,817	3,770	15	3,785	52,602
1926 ...	63,630	380	64,010	48,314	2,421	50,735	3,252	15	3,267	54,002
1928 ...	64,272	800	65,072	47,422	2,380	49,802	2,072	9	2,081	51,883
1929 ...	63,281	210	63,491	46,994	2,089	49,083	1,777	20	2,066	49,289
1930 ...	56,927	203	57,130	29,744	1,884	31,628	4,134	...	4,134	35,762
1931 ...	29,538	279	29,817	28,885	1,289	30,174	1,462	229	1,691	31,865
1932 ...	23,442	506	23,948	29,734	1,078	30,812	3,414	472	3,886	34,698
1933 ...	28,783	1,066	29,849	32,021	889	32,910	12,498	1,205	13,703	46,613
1934 ...	30,936	1,329	32,265	38,602	760	39,362	1,308	1,572	2,880	42,242
1935 ...	39,031	1,867	40,898	33,908	828	34,826	1,170	1,733	2,903	37,729
1936 ...	43,508	1,570	45,378	41,495	1,047	42,542	2,145	1,845	4,990	47,532
1937 ...	49,173	2,124	51,297	50,481	1,298	51,782	3,436	2,085	5,521	57,303
British Currency Values.										
1931 ...	26,071	240	26,311	24,603	1,098	25,701	1,142	179	1,321	27,022
1932 ...	18,399	398	18,797	23,325	845	24,170	2,734	378	3,112	27,282
1933 ...	22,981	850	23,831	25,605	710	26,275	9,998	964	10,962	37,237
1934 ...	24,609	1,061	25,760	30,820	607	31,427	1,046	1,258	2,304	33,731
1935 ...	31,182	1,491	32,653	27,144	661	27,805	936	1,386	2,322	30,127
1936 ...	34,737	1,493	36,230	33,130	836	33,966	2,510	1,476	3,992	37,958
1937 ...	39,260	1,696	40,956	40,307	1,036	41,343	2,748	1,668	4,416	45,759

\* Year ended 31st December.

The Federal Government imposed restrictions upon the movement of gold during the war period, and its embargo upon export was not removed until April, 1925. In the earlier part of that year the Australian pound was at a premium in relation to sterling, and a large quantity of gold was imported from the United States. Subsequently the movement was reversed, and in 1926-27 the exports from New South Wales to the United States included gold specie to the value of £10,000,000.

The export of gold again became subject to approval by the Commonwealth authorities in January, 1930, and during the last seven years large amounts have been transmitted abroad.

Imports of bullion and specie consist mainly of gold from New Guinea, Papua and New Zealand. The imports in 1933-34 consisted of gold valued at £999,621 (sterling), silver £61,335 and bronze £146; and included gold of the value of £892,104 from New Guinea, £38,939 from Papua, and £55,198 from New Zealand. In the following year imports were gold £1,475,029, silver £15,755 and bronze £70. The gold included £1,368,409 from New Guinea, £32,837 from Papua and £58,841 from New Zealand. Imports of bullion and specie during 1935-36 amounted to £1,493,182 (sterling), of which £1,414,619 was gold, and £78,536 silver. The gold included £1,186,911 from New Guinea, £98,086 from New Zealand, and £49,521 from Papua. In 1936-37 bullion and specie of the value of £1,696,214 was imported. In this was included gold valued at £1,662,897

and silver and bronze £33,317. Of the gold, £148,952 came from Fiji, £1,350,241 from New Guinea, £74,825 from New Zealand, and £88,552 from Papua.

The exports in 1932-33 valued in Australian currency were as follows: Gold, £13,344,888; silver, £352,934; and bronze £5,263. The shipments to the United Kingdom were valued at £11,436,094 and to the United States at £2,199,406.

In 1933-34 exports consisted of gold £2,646,457, silver £230,335 and bronze £2,794. The aggregate value was £2,879,586, and shipments to the United Kingdom were valued at £2,808,996.

Exports in 1934-35 amounted to £2,903,508, of which £2,774,205 was gold, £127,774 silver, and £1,529 bronze. Of the gold the United Kingdom took £2,769,472.

The total value of bullion and specie exported in 1935-36 was £4,989,562, of which £4,857,283 was gold. Of the latter the United Kingdom took £965,983, France, £301,893, and the United States of America, £3,589,407. In 1936-37 bullion and specie of the value of £5,520,528 was exported, of which £5,425,582 was gold, £94,410 silver, and £536 bronze. Of the gold, £5,268,229 was shipped to the United States, £131,618 to the United Kingdom, and £27,735 to France.

#### DIRECTION OF TRADE.

The direction of the overseas trade of New South Wales is indicated in the following statement, which shows the value of imports to and of exports from the principal countries during the last three years. Particulars regarding the imports relate to the country of origin and the values of imports and exports are expressed respectively in British and Australian currencies:—

Country.	Overseas Imports (Country of Origin).			Overseas Exports.		
	1934-35.	1935-36.	1936-37.	1934-35.	1935-36.	1936-37.
	£ stg.	£ stg.	£ stg.	£ A	£ A	£ A
United Kingdom ...	12,558,336	13,166,663	15,709,978	16,491,824	16,111,579	18,584,309
Canada ...	1,632,609	2,192,466	2,753,414	506,172	568,253	839,138
Union of South Africa ...	89,794	161,404	143,673	110,591	126,072	134,483
India and the East ...	1,846,106	1,968,106	2,415,117	916,880	825,386	1,029,442
New Zealand ...	675,369	756,319	653,071	2,274,599	2,732,849	3,652,155
*South Sea Islands ...	1,718,347	1,722,179	2,222,754	1,660,989	1,376,760	1,568,618
Other British Possessions...	157,184	281,373	211,480	389,014	606,418	888,736
<b>Total, British</b> ...	<b>18,077,745</b>	<b>20,248,510</b>	<b>24,109,487</b>	<b>21,759,069</b>	<b>22,347,317</b>	<b>26,687,881</b>
Belgium ...	225,016	261,030	382,700	2,567,275	3,329,871	3,736,337
France ...	414,194	392,216	437,978	2,096,138	3,024,567	3,434,265
Germany ...	953,137	1,264,055	1,587,567	722,530	1,015,973	2,015,443
Italy ...	210,896	141,299	147,432	469,041	413,888	2,388,776
Netherlands ...	260,327	302,856	461,947	568,917	483,703	680,144
Norway ...	196,659	184,202	190,025	2,222	4,368	53,091
Sweden ...	336,174	356,081	402,501	62,012	54,783	93,220
Switzerland... ..	199,833	245,333	256,365	152,805	82,825	115,263
Other European ...	600,084	621,295	628,866	783,633	1,169,516	1,652,615
United States and Hawai...	5,305,178	6,393,805	6,389,152	1,332,989	6,404,579	10,460,607
Japan ...	2,117,485	2,220,439	1,752,259	4,746,945	6,928,664	4,194,480
Netherlands East Indies ...	1,854,017	1,981,341	2,382,312	408,025	39,582	446,583
China and other Eastern Countries ...	275,751	637,015	677,193	1,667,654	1,373,616	726,391
South Sea Islands ...	13,817	22,961	65,408	321,162	362,226	431,361
Other Foreign Countries ...	248,038	173,668	220,898	68,315	138,722	186,055
<b>Total, Foreign</b> ...	<b>13,211,566</b>	<b>15,197,605</b>	<b>15,982,603</b>	<b>15,970,163</b>	<b>25,184,883</b>	<b>30,614,631</b>
Outside Packages and Containers ...	763,540	784,346	863,771	...	...	...
<b>Total, All Countries</b> ...	<b>32,652,791</b>	<b>36,230,461</b>	<b>40,955,861</b>	<b>37,729,232</b>	<b>47,532,200</b>	<b>57,302,512</b>

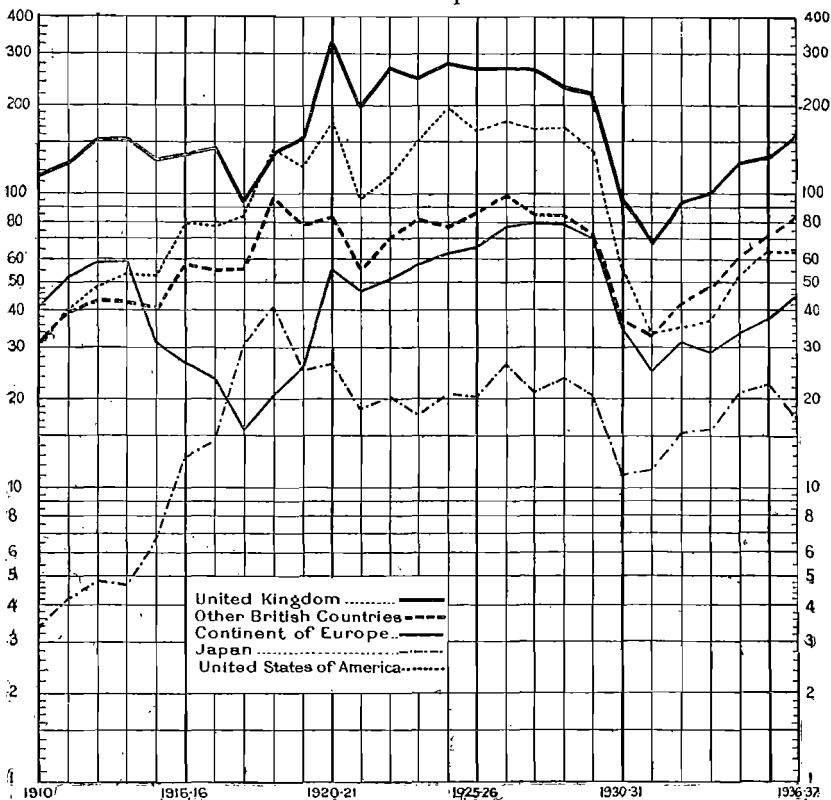
\* Includes New Guinea and Papua.

In the oversea trade of New South Wales the value of the goods to and from the United Kingdom exceeds the trade with any other country. In 1936-37 imports valued at £15,709,978 or 38.3 per cent. of the total imports were the products of the United Kingdom. Exports shipped to that country were valued at £18,584,309, representing 32.4 per cent. of the total exports. The corresponding proportions in 1921 were imports 45.5 per cent. and exports 39.2 per cent. The figures shown in respect of trade with the United Kingdom are exclusive of imports from and exports to the Irish Free State.

Direct trade with European countries other than the United Kingdom in 1936-37 consisted of imports valued at £4,496,684 or 10.9 per cent., and exports valued at £14,193,068 or 24.8 per cent. The value of imports from the Continent of Europe in 1920-21 was £5,546,598, the value of exports thereto was £7,945,366, and the relative proportions were 7.6 per cent. of imports and 15.1 per cent. of exports.

#### OVERSEA IMPORTS, COUNTRY OF ORIGIN, 1910 TO 1936-37.

Ratio Graph.



The numbers at the side of the graph represent £100,000 sterling. The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the percentage of increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

The interchange between New South Wales and British countries usually shows a pronounced excess of imports from the United Kingdom, Canada, India and Ceylon and an excess of exports to New Zealand and the South Sea Islands. In 1932-33, when a large amount of gold was shipped, and in each year since there has been an excess of exports to the United Kingdom.

Trade with most of the foreign countries with which the interchange is large, *e.g.*, France, Germany, Belgium, Italy and Japan, results in an excess of exports. In contrast there is usually an excess of imports from the United States and Netherlands East Indies. In 1936-37 the exports to the United States exceeded the imports owing to heavy gold shipments during that year.

The following statement shows the value in British currency of British and foreign oversea imports in each of the last nine years as compared with the annual average values in the four quinquennial periods between 1911 and 1931.

Period.	Value of Oversea Imports, according to Country of Origin—Annual Average. (British Currency)								Total Imports
	United Kingdom	Other British Countries	Total British Empire	Continent of Europe.	United States of America	Japan.	Other Foreign Countries	Total Foreign Countries	
	£000	£000	£000	£000	£000	£000	£000	£000	£000
1911 to 1915-16* ...	14,006	4,459	18,465	4,541	5,479	662	1,393	12,075	30,540
1916-17 to 1920-21 ...	17,227	7,370	24,597	2,825	11,079	2,747	2,938	20,489	45,086
1921-22 to 1925-26 ...	25,068	7,396	32,464	5,674	14,405	1,951	2,884	24,914	57,378
1926-27 to 1930-31 ...	21,705	7,566	29,271	6,802	14,210	2,075	3,570	26,657	56,189†
1928-29 ...	23,610	8,449	32,068	7,760	16,884	2,391	4,388	31,423	63,491
1929-30 ...	22,200	7,246	29,446	7,143	13,947	2,080	3,904	27,074	57,130†
1930-31 ...	9,555	3,642	13,197	3,564	5,582	1,108	2,165	12,419	26,311†
1931-32 ...	6,791	3,242	10,033	2,481	3,278	1,141	1,403	8,303	18,797†
1932-33 ...	9,266	4,241	13,507	3,130	3,524	1,531	1,534	9,719	23,831†
1933-34 ...	10,013	4,804	14,817	2,912	3,679	1,600	2,157	10,348	25,760†
1934-35 ...	12,559	6,119	18,678	3,396	5,304	2,117	2,395	13,212	32,653†
1935-36 ...	13,167	7,082	20,249	3,768	6,392	2,220	2,817	15,197	36,230†
1936-37 ...	15,710	8,399	24,109	4,496	6,389	1,752	3,346	15,983	40,566†

## Per cent. of Total Oversea Imports.

1911 to 1915-16* ...	45.9	14.6	60.5	14.9	17.9	2.2	4.5	39.5	100
1916-17 to 1920-21 ...	38.2	16.4	54.6	6.2	26.6	6.1	6.5	45.4	100
1921-22 to 1925-26 ...	43.7	12.9	56.6	9.9	25.1	3.4	5.0	43.4	100
1926-27 to 1930-31 ...	38.8	13.5	52.3	12.2	25.4	3.7	6.4	47.7	100
1928-29 ...	37.2	13.3	50.5	12.2	26.6	3.8	6.9	49.5	100
1929-30 ...	39.3	12.8	52.1	12.6	24.7	3.7	6.9	47.9	100
1930-31 ...	37.3	14.2	51.5	13.9	21.8	4.3	8.5	48.5	100
1931-32 ...	37.0	17.7	54.7	13.5	17.9	6.2	7.7	45.3	100
1932-33 ...	39.9	18.2	58.1	13.5	15.2	6.6	6.6	41.9	100
1933-34 ...	39.8	19.1	58.9	11.6	14.6	6.4	8.5	41.1	100
1934-35 ...	39.4	19.2	58.6	10.7	16.6	6.6	7.5	41.4	100
1935-36 ...	38.8	18.3	57.1	10.6	18.0	6.3	8.0	42.9	100
1936-37 ...	39.2	20.3	60.1	11.2	15.9	4.4	8.4	39.9	100

\* Calendar years 1911 to 1913, and years ended 30th June, 1915 and 1916.

† Includes outside packages since 1st January, 1930, not included in previous columns viz., £610,219 in January-June, 1930, £695,067 in 1930-31, £401,244 in 1931-32, £204,652 in 1932-33, £595,497 in 1933-34, £703,540 in 1934-35, £784,346 in 1935-36, and £863,771 in 1936-37.

The imports of British origin represent 60 per cent. of the total, and more than two-thirds of the British goods are imported from the United Kingdom. The proportion of imports from the continent of Europe, which had risen slowly up to 1930-31, declined from 13.9 per cent. in that year to 11.2 per cent. in 1936-37. Importations from the United States increased very rapidly during the war period and represented 26.6 per cent. of the total in 1928-29. There has since been a decline to 15.9 per cent.,

but this country still ranks second as a source of imports. The proportion of Japanese goods, formerly between 3 per cent. and 4 per cent. increased to 6.3 per cent. in 1935-36, but fell to 4.4 per cent. in 1936-37. The bulk of the goods classed as "other foreign" are imported from Netherlands East Indies, the proportion in 1936-37 being 8.4 per cent.

The following comparison relates to the annual value in Australian currency of overseas exports from New South Wales to British and foreign countries since 1911:—

Period.	Value of Oversea Exports to British and Foreign Countries—Annual Average. (Australian Currency)								Total Exports
	United Kingdom	Other British Countries	Total British Empire	Continent of Europe	United States of America	Japan.	Other Foreign Countries	Total Foreign Countries	
	£000	£000	£000	£000	£000	£000	£000	£000	£000
1911 to 1915-16* ...	13,212	5,099	18,281	8,117	4,002	1,335	1,673	15,127	33,408
1916-17 to 1920-21	22,279	11,778	34,057	3,349	6,688	2,895	2,722	15,654	49,711
1921-22 to 1925-26	16,614	6,217	22,831	14,656	5,109	5,066	2,002	26,833	49,664
1926-27 to 1930-31	12,983	5,364	18,347	14,967	5,714	5,098	2,176	27,955	46,302
1928-29 ...	13,011	6,037	19,048	17,732	3,166	6,391	2,952	30,241	49,289
1929-30 ...	11,623	5,666	17,189	10,886	3,391	2,785	1,511	18,573	35,762
1930-31 ...	11,285	4,223	15,508	8,632	1,555	4,297	1,873	16,357	31,865
1931-32 ...	13,698	4,342	18,040	6,417	3,189	5,048	2,004	16,658	34,698
1932-33 ...	22,346	4,625	26,971	8,938	2,983	4,642	3,079	19,642	46,613
1933-34 ...	16,123	4,663	20,786	12,979	1,190	5,996	1,291	21,456	42,242
1934-35 ...	16,492	5,267	21,759	7,425	1,328	4,747	2,470	15,970	37,729
1935-36 ...	16,111	6,236	22,347	9,579	6,402	6,929	2,275	25,185	47,532
1936-37 ...	18,584	8,104	26,688	14,169	10,457	4,194	1,795	30,615	57,303

#### PER CENT. OF TOTAL OVERSEA EXPORTS.

1911 to 1915-16* ...	39.5	15.2	54.7	24.3	12.0	4.0	5.0	45.3	100
1916-17 to 1920-21	44.8	23.7	68.5	6.7	13.5	5.8	5.5	31.5	100
1921-22 to 1925-26	33.5	12.5	46.0	29.5	10.3	10.2	4.0	54.0	100
1926-27 to 1930-31	28.0	11.6	39.6	32.3	12.3	11.0	4.8	60.4	100
1928-29 ...	26.4	12.2	38.6	36.0	6.4	13.0	6.0	61.4	100
1929-30 ...	32.5	15.6	48.1	30.4	9.5	7.8	4.2	51.9	100
1930-31 ...	35.4	13.3	48.7	27.1	4.9	13.5	5.8	51.3	100
1931-32 ...	39.5	12.5	52.0	18.5	9.2	14.5	5.8	48.0	100
1932-33 ...	47.9	10.0	57.9	19.2	6.4	9.9	6.6	42.1	100
1933-34 ...	38.2	11.0	49.2	30.7	2.8	14.2	3.1	50.8	100
1934-35 ...	43.7	14.0	57.7	19.7	3.5	12.6	6.5	42.3	100
1935-36 ...	33.9	13.1	47.0	20.2	13.5	14.6	4.7	53.0	100
1936-37 ...	32.4	14.2	46.6	24.7	18.3	7.3	3.1	53.4	100

\* Calendar years 1911 to 1913 and years ended 30th June, 1915 and 1916.

In 1933-34 exports to British countries declined below 50 per cent., and those to the Continent of Europe increased absolutely and relatively in consequence of a rise in prices of wool which is the principal item of trade. In 1934-35 there was a considerable decline in the total export trade of the State due, principally, to the fall in the prices of wool. British countries which take a greater variety of products took nearly 58 per cent. of the exports and the Continent of Europe 19.7 per cent. In each of the following years there was a large increase in the value of wool exported and the proportion of total exports taken by the United Kingdom fell to 32.4 per cent. in 1936-37.

The United States of America, which usually provides more than one-fifth of the imports, has taken only a small proportion of exports except when

gold of considerable value is included, *e.g.*, £10,000,000 in 1926-27, £2,000,000 in 1931-32 and 1932-33, £3,589,407 in 1935-36, and £5,268,229 in 1936-37.

In the trade with Eastern countries the value of imports exceeded £9,000,000 in 1920-21 and 1929-30, and then declined. In 1936-37 imports exceeded £7,200,000. Exports, on the other hand, increased and in 1936-37 the value was £6,397,000, as compared with £5,346,000 in 1920-21 and £6,125,000 in 1930-31.

Excluding the export of bullion and specie, the distribution of the merchandise exported during 1935-36 was as follows:—British countries 50 per cent., including 35 per cent. to the United Kingdom and foreign countries 50 per cent., including 22 per cent. to Europe, 16 per cent. to Japan, and 7 per cent. to the United States of America.

In 1936-37 the corresponding proportions were British 51 per cent., United Kingdom 36 per cent., Europe 27 per cent., Japan 8 per cent. and the United States 10 per cent.

#### ARTICLES OF IMPORT.

A classification of the oversea goods imported into New South Wales during 1928-29 and the last three years is shown in the following table. The items are grouped in accordance with a statistical classification of imports adopted by the Department of Trade and Customs, and values are expressed in British currency.

Classification of Oversea Imports.	1928-29.	1934-35.	1935-36.	1936-37.
	£ stg.	£ stg.	£ stg.	£ stg.
Foodstuffs of Animal Origin... ..	1,126,533	613,118	732,817	747,957
Foodstuffs of Vegetable Origin, Bever- ages (non-alcoholic), etc.... ..	3,445,517	1,763,894	1,844,278	2,231,632
Spirituos and Alcoholic Liquors ...	1,040,186	379,645	484,852	415,733
Tobacco and Preparations thereof ...	1,905,452	1,008,640	1,175,976	1,246,087
Live Animals ... ..	118,334	105,788	88,749	130,505
Animal Substances not Foodstuffs	665,708	385,708	471,579	420,624
Vegetable Substances and Unmanu- factured Fibres ... ..	1,776,112	1,103,782	1,191,411	1,607,619
Apparel... ..	2,512,082	569,577	607,560	615,687
Textiles ... ..	10,031,607	5,410,436	5,149,719	5,588,497
Yarns and Manufactured Fibres ...	2,280,143	1,119,589	1,062,704	1,033,353
Oils, Fats, and Waxes.. ... ..	4,393,111	1,810,188	2,244,333	2,624,898
Paints and Varnishes ... ..	397,543	260,355	297,767	360,394
Stones and Minerals (including Ores and Concentrates) ... ..	402,354	213,705	245,919	235,243
Machines and Machinery ... ..	7,206,591	2,956,920	4,099,735	5,271,006
Metals and Metal Manufactures other than Machinery ... ..	10,996,937	4,570,181	5,421,004	6,010,014
Rubber and Rubber Manufactures ...	1,219,534	400,747	532,757	768,661
Leather and Leather Manufactures ...	168,033	40,939	55,047	69,194
Wood and Wicker ... ..	2,555,612	842,988	835,335	857,808
Earthenware, China, Glass, etc. ...	1,159,811	598,440	698,319	768,967
Paper ... ..	2,346,801	1,456,174	1,568,036	1,846,784
Stationery and Paper Manufactures	1,282,106	720,053	777,662	812,925
Jewellery, Timepieces, and Fancy Goods ... ..	1,342,620	466,046	552,260	594,266
Optical, Surgical, and Scientific In- struments ... ..	891,186	721,974	794,150	842,048
Drugs, Chemicals, and Fertilisers ...	1,828,559	1,414,925	1,594,712	1,654,709
Miscellaneous ... ..	2,188,098	1,464,495	1,426,252	1,621,260
Outside Packages and Containers ...	"	763,540	784,346	863,771
Bullion and Specie ... ..	210,523	1,490,854	1,493,192	1,696,214
Total Imports ... ..	63,491,123	32,652,791	36,230,461	40,955,861

\* Not recorded.

During 1936-37 the group consisting of machinery, metals and metal manufactures was credited with £11,281,017 or 27 per cent. of the imports. Next in order was the group, apparel, textiles and yarns with £7,257,537, or 18 per cent.; then foodstuffs, spirituous liquors and tobacco, £4,641,414, or 11 per cent.; paper and stationery, £2,659,709, or 6 per cent.; and oils, fats and waxes, £2,624,898, 6 per cent. Of the increase of £4,725,400 in the total imports during 1936-37 machines and machinery accounted for £1,171,271; metals and metal manufactures, £589,010, textiles, £438,778; vegetable substances and unmanufactured fibres, £416,208; foodstuffs of vegetable origin, etc., £387,354; paper, stationery and paper manufactures, £314,011; oils, fats and waxes, £380,565; and rubber and rubber manufactures, £235,904. There were increases in all other groups except spirituous and alcoholic liquors, animal substances not foodstuffs, yarns and manufactured fibres, and stones and minerals.

The value of imports in the textile group in 1928-29 was over £14,809,000. It fell below £6,000,000 in 1930-31, but subsequent fluctuations were not so pronounced as in other large groups, such as metals and machinery. A comparative statement of the principal items in the textile group and in smaller groups such as paper, fancy goods, etc., is shown below:—

Items of Import.		1928-29.	1933-34.	1934-35.	1935-36.	1936-37.
		£ stg.	£ stg.	£ stg.	£ stg.	£ stg.
Socks and stockings	...	£ 793,114	4,389	9,124	13,856	14,576.
Piece goods	... ..	£ 7,874,705	3,719,887	4,306,912	3,964,920	4,241,560.
Floor coverings	... ..	£ 1,066,508	354,820	476,568	562,223	652,575.
Bags and sacks	... ..	£ 1,239,308	552,391	449,569	514,567	522,369.
Yarns	... ..	£ 952,427	415,970	599,476	487,009	458,767
Other apparel, textiles, etc.		£ 2,897,770	1,005,142	1,257,953	1,277,408	1,367,690
Total apparel, textiles, yarns and manufactured fibres.		£ 14,823,832	6,052,599	7,099,602	6,819,983	7,257,537
Printing paper	{ tons	75,486	60,466	75,697	82,502	102,292
		£ 1,440,864	744,018	860,116	933,214	1,141,862
Books (printed)	... ..	£ 533,999	325,933	363,242	417,925	428,810
Glass and glassware	... ..	£ 529,253	167,793	226,813	273,907	316,808
Jewellery and precious stones.		£ 493,445	88,086	117,315	150,190	180,437
Cinematograph films	... ..	£ 229,072	449,494	388,231	433,436	422,213

The group comprised by metals, machinery and other metal manufactures was formerly the most important in point of value. In 1928-29 the value was £18,203,000, and in 1931-32 only £2,660,000. In 1936-37 it rose to £11,281,017, and held first place during that year. A summary of

the principal items in the group is shown below, with similar details relating to petrol and lubricating oil, rubber, timber and copra. The values are stated in British currency.

Items of Import.		1928-29.	1934-35.	1935-36.	1936-37.
Electrical Machinery and Appliances	£	3,442,023	1,258,345	1,556,530	2,060,189
Other Machinery ... ..	£	3,764,568	1,698,575	2,543,205	3,210,817
Total, machinery ...		£ 7,206,591	2,956,920	4,099,735	5,271,006
Motor car—Bodies ... ..	{ No. £	6,719 690,461	953 74,985	711 62,476	335 35,773
Chassis—Unassembled ...	{ No. £	33,559 2,973,573	14,787 1,171,311	21,897 1,628,290	23,100 1,841,800
Assembled ... ..	{ No. £	2,641 417,523	510 86,223	621 103,852	500 98,839
Other vehicles and parts ...	£	1,292,538	476,074	573,029	794,789
Total, vehicles and parts		£ 5,374,095	1,808,593	2,367,647	2,771,201
Iron and steel—Plate and sheet ...	{ cwt. £	1,478,360 1,250,034	709,871 703,283	821,440 870,516	705,867 807,697
Other ... ..	£	567,186	409,059	353,185	381,685
Pipes and tubes ... ..	{ cwt. £	556,256 671,207	150,579 174,101	87,118 126,673	95,993 156,132
Other metals and metal manufactures	£	3,134,377	1,475,145	1,702,983	1,893,296
Copra ... ..	{ cwt. £	576,414 651,683	349,643 133,630	366,817 200,386	418,226 338,331
Oils—Petroleum spirit, etc. ...	{ gal. £	72,200,636 2,697,151	64,105,347 832,209	73,640,100 1,115,888	83,944,632 1,367,719
„ crude ... ..	{ gal. £	26,980,605 378,348	25,228,128 246,755	28,556,639 295,967	31,668,456 331,354
Lubricating (mineral) ... ..	{ gal. £	6,576,245 526,596	5,171,037 240,195	5,045,217 249,519	5,582,135 279,113
Rubber—Crude and waste ...	{ cwt. £	125,659 626,443	105,579 292,184	130,342 410,306	148,525 642,297
Tyres, pneumatic ... ..	{ lb. £	1,282,042 174,853	101,818 9,928	88,743 6,404	137,202 10,760
Timber, undressed ... ..	{ 000 sup. ft. £	179,595 1,821,245	166,124 682,284	192,579 666,786	187,923 674,016

Notwithstanding a marked increase as compared with the previous year, the value of imports of vehicles and parts in 1936-37 was £2,602,894 below the value in 1928-29. The quantity of petrol, refined and crude, imported in 1936-37 was 17 per cent. greater than in 1928-29, but the value was 45 per cent. less owing to decreases in prices.

The number of vessels (other than yachts, launches, etc.), included in the imports was twelve in 1928-29, three in 1932-33, five in 1933-34, seven in 1934-35, 3 in 1935-36, and 6 in 1936-37; this item is included in the miscellaneous group.

The imports of foods and narcotics consist for the most part of tropical products, tinned fish, spirits and tobacco. Details are shown below, the values being stated in British currency: —

Items of Import.				1928-29.	1934-35.	1935-36.	1936-37.	
Fish, in tins	...	...	...	lb.	12,257,172	10,338,735	13,120,711	13,778,784
				£	568,319	294,612	356,557	368,195
Tea	...	...	...	lb.	28,732,712	27,809,304	26,752,815	29,873,656
				£	2,114,514	1,268,997	1,288,627	1,560,530
Whisky	...	...	...	gal.	650,133	288,721	399,183	310,048
				£	744,358	310,581	407,326	334,997
Other foods and beverages			...	£	2,185,045	882,467	1,009,437	1,131,605
Tobacco, cigars, etc.	...	...	...	lb.	17,803,558	12,317,161	13,993,843	15,314,733
				£	1,905,482	1,008,640	1,175,976	1,246,087
Total, foods, beverages and tobacco				£	7,517,718	3,765,297	4,237,923	4,641,414

Although the quantity of tea imported in 1936-37, was greater by 4 per cent. than in 1928-29 the value was 36 per cent. lower. Imports of tobacco did not decline appreciably until 1931-32, though prices were lower; in 1932-33 and 1933-34 there were further falls in quantity but the value had risen, and in the latter year was 20 per cent. greater than in 1931-32. As compared with 1933-34 the quantity imported in 1934-35 increased by more than 49 per cent., but the value under the influence of higher prices increased by more than 106 per cent. In 1935-36 the quantity and value of tobacco imported increased by 14 per cent. and 17 per cent. respectively, and in 1936-37 there were further increases of 9 per cent. and 6 per cent. respectively. Imports of whisky dropped from 650,133 (proof) gallons in 1928-29 to 55,000 (proof) gallons in 1931-32 under the combined influence of higher customs duties and reduced demand. It is probable that a steep decline which occurred in 1930-31 was due to earlier importations in anticipation of the tariff changes and the increases since indicate that the stocks then accumulated have become depleted. As compared with 1935-36 the imports of whisky in 1936-37 showed decreases of 22 per cent. and 18 per cent. respectively in quantity and value.

#### ARTICLES OF EXPORT.

Raw materials form the great bulk of the oversea exports of Australian produce from New South Wales. In regard to such commodities as wool, wheat, etc., the quantity available for export depends mainly on local seasonal conditions, but the exportation of industrial metals is influenced to a greater extent by market prices as a movement up or down reacts promptly on the productive activity. The quantity and value of the principal commodities exported from New South Wales during each of the last three years are shown below in comparison with the annual averages

during the five years ended 30th June, 1929, i.e., the period of prosperous trading which immediately preceded the decline due to world-wide depression.

Oversea Exports of Australian Produce from New South Wales.									
Items of Export.	Quantity.				Value (Australian Currency).				
	Annual Average 1924-25 to 1928-29.	1934-35.	1935-36.	1936-37.	Annual Average 1924-25 to 1928-29.	1934-35.	1935-36.	1936-37.	
	Thousands omitted.				£	£	£	£	
Wool—Greasy ... lb.	302,525	331,784	313,409	337,510	24,902	14,650	19,421	24,601	
Scoured ... lb.	21,395	23,755	26,607	24,848	2,495	1,076	2,203	2,501	
Tops, etc. ... lb.	2,513	4,226	4,377	4,029	568	392	484	530	
Total Wool (as in Grease) lb.	354,000	392,800	370,040	395,377	27,965	16,718	22,108	27,632	
Hides and Skins—									
Cattle and Calf ... No.	564	611	791	1,136	615	250	418	637	
Rabbit and Hare ... lb.	10,251	6,202	6,177	4,196	2,123	631	1,158	1,008	
Sheep, with Wool ... No.	2,681	2,254	3,099	3,516	1,190	408	723	1,072	
Other Hides and Skins ...	...	...	...	...	456	150	197	208	
Total Hides and Skins ...	...	...	...	...	4,384	1,439	2,496	2,925	
Meat—									
Frozen Mutton ... lb.	14,550	29,786	10,006	24,538	287	476	165	398	
Lamb ... lb.	12,165	39,242	38,886	41,053	364	1,027	1,076	1,154	
Rabbits and Hares ... prs.	2,904	2,769	1,442	330	271	145	84	30	
Other Meat ...	...	...	...	...	621	567	466	593	
Total, Meat ...	...	...	...	...	1,543	2,215	1,791	2,175	
Leather ...	...	...	...	...	370	267	315	484	
Tallow ... cwt.	320	318	160	252	592	384	263	331	
Butter ... lb.	24,026	57,672	32,819	20,366	1,725	2,155	1,653	1,137	
Eggs in Shell ... doz.	915	6,843	5,137	5,430	71	356	264	323	
Wheat ... centals	9,266	9,167	13,920	12,151	4,743	2,420	4,243	5,400	
Flour ... centals	2,936	5,450	4,608	3,736	1,895	1,823	1,721	1,909	
Copper (Ingots) ... cwt.	51	1	...	35	175	2	1	97	
Lead (pig) ... cwt.	1,411	1,015	1,148	963	2,072	709	1,196	1,433	
Tin (Ingots) ... cwt.	29	22	16	13	375	302	200	193	
Coal ... tons	668	304	306	340	797	272	275	300	
Timber (undressed) ... sup. ft.	21,873	29,815	23,128	28,205	366	313	298	405	
Other Merchandise ...	...	...	...	...	3,110	4,623	4,671	7,038	
Total Merchandise ...	...	...	...	...	50,183	33,998	41,495	51,782	
Bullion and Specie ...	...	...	...	...	3,187	1,170	3,145	5,521	
Total Exports ...	...	...	...	...	53,370	35,168	44,640	57,303	

The aggregate value of the exports of the staple products, wool, hides and skins, meat, butter, wheat and flour, amounted to £42,300,000 per annum during the five years ended June, 1929, and then declined to £23,700,000 in 1929-30. It was maintained at this level in 1930-31; showed an increase in each succeeding year until 1933-34, when it reached £33,000,000; declined to £26,770,000 in 1934-35, rose to £34,012,000 in 1935-36 and to £41,178,000 in 1936-37.

In the last mentioned year there were additions of £5,524,000 to wool, £1,345,000 to wheat and flour, £384,000 to meat, £59,000 to eggs, £68,000 to tallow, £107,000 to undressed timber, £237,000 to lead (pig), £96,000 to copper ingots, £429,000 to hides and skins, £169,000 to leather, and £25,000 to coal, and a decline of £520,000 in respect of butter, and tin ingots as compared with the previous year.

During the quinquennial period 1924-25 to 1928-29 the value of wool exported represented, on an average, nearly 56 per cent. of the total exports (excluding bullion and specie), and the proportion was only slightly lower in 1929-30, despite a heavy fall in values. This was due to the fact that only a small quantity of wheat was exported and the value of wheat and

flour combined was only 5.5 per cent. of the total. In later years the percentage of wool declined to 50 per cent. and the proportion represented by wheat and flour rose to nearly 20 per cent. In 1933-34 there was another steep decline in wheat shipments so that wheat and flour represented only 7.5 per cent. of exports and wool 62.7 per cent. The prices of wool fell in 1934-35, and during that year this commodity represented 49.2 per cent. of the exports. Prices increased in 1935-36, and although the quantity exported was less than in 1934-35 the value increased by £5,390,000 and wool represented 53.5 per cent. of the total exports. In 1936-37 wool exported increased both in quantity and value, and represented 53.5 per cent. of the total exports that year. The position of wheat and flour has improved each year since 1934-35.

The relative importance of the various staple products in the oversea trade of the State during each of the last five years is shown below, in comparison with the proportion in the average annual value of exports during the five years ended 30th June, 1929. Exports of bullion and specie are not included:—

Items of Export.	Value of Oversea Exports of Australian Produce from New South Wales.					
	Annual Average 1924-25 to 1928-29.	1932-33.	1933-34	1934-35.	1935-36.	1936-37.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
Wool ... ..	55.7	50.1	62.8	49.2	53.5	53.4
Hides and Skins...	8.7	2.7	4.1	4.2	6.0	5.6
Frozen Lamb and Mutton ...	1.3	2.5	3.4	4.4	3.0	3.0
Other Meat ... ..	1.8	2.4	1.5	2.1	1.3	1.2
Leather ... ..	.7	.7	.8	.8	.8	.9
Tallow ... ..	1.2	1.1	.6	1.1	.6	.6
Butter ... ..	3.4	5.6	5.5	6.3	4.0	2.2
Eggs in Shell ... ..	.1	1.2	.8	1.0	.6	.6
Wheat ... ..	9.5	14.7	4.1	7.1	10.3	10.4
Flour ... ..	3.8	5.0	3.4	5.4	4.2	3.7
Lead (pig) ... ..	4.1	1.9	1.7	2.1	2.7	2.8
Tin (ingots) ... ..	.8	.6	.8	.9	.5	.4
Coal ... ..	1.6	.9	.7	.8	.7	.6
Timber (undressed) ... ..	.7	.3	.4	.9	.7	.8
Other ... ..	6.6	10.3	9.4	13.7	11.1	13.8
Total, Merchandise ...	100	100	100	100	100	100

The bulk of the wool is exported to Great Britain, Japan, Germany, France and Belgium. In addition to the exports of wool as shown in the table, a large quantity of sheep skins with wool is included with hides and skins. These are sent, for the most part, to France, where 1,475,200 valued at £204,900 were sent in 1932-33, 1,473,598 valued at £389,417 in 1933-34, 1,621,051, valued at £266,319 in 1934-35, 2,009,089 valued at £417,869 in 1935-36, and 2,333,603 valued at £658,886 in 1936-37.

Particulars as to the destination of the principal items of Australian produce exported overseas from New South Wales during 1936-37 are shown Below:—

Country.	Wool.			Hides and Skins.	Frozen Lamb and Mutton	Tallow.	Butter.	Whcat.	Flour.
	Greasy.	Scoured.	Tops, etc.						
Quantity (Thousands omitted).									
	lb.	lb.	lb.		lb.	cwt.	lb.	cental.	cental.
United Kingdom ...	108,375	11,999	767	...	63,496	46	15,851	6,159	861
Belgium ...	56,514	3,238	...	...	...	12	...	...	...
France ...	37,343	3,821	...	...	...	2	...	...	...
Germany ...	20,423	1,297	...	...	...	15	...	207	...
Italy ...	14,706	297	...	...	...	1	...	2,747	...
Other European ...	26,719	1,636	60	...	442	17	...	2,676	23.
United States ...	33,865	881	179	...	...	54	...	...	...
China and Hong Kong ...	20	65	353	...	439	7	1,253	6	202
Japan ...	38,745	91	52	...	...	16	175	312	...
Other Eastern ...	...	...	166	...	1,352	47	2,313	...	1,901
Other Countries ...	800	1,523	2,452	...	462	36	774	43	689
Total ...	837,510	24,848	4,029	...	66,101	253	20,366	12,150	3,736
Value Australian currency (Thousands omitted).									
	£	£	£	£	£	£	£	£	£
United Kingdom ...	7,606	1,147	82	514	1,487	61	893	2,729	446.
Belgium ...	3,340	305	...	27	...	15	...	...	...
France ...	2,296	421	...	669	...	3	...	...	...
Germany ...	1,620	142	...	88	...	20	...	89	...
Italy ...	1,089	27	...	30	...	1	...	1,230	...
Other European ...	1,803	173	9	87	7	23	...	1,182	12.
United States ...	3,167	125	17	1,329	...	57	...	...	...
China and Hong Kong ...	1	5	40	4	10	10	64	2	137
Japan ...	3,603	10	5	89	...	24	9	147	...
Other Eastern ...	...	...	21	6	36	65	128	...	940
Other Countries ...	76	146	356	82	12	52	43	21	374
Total ...	24,601	2,501	530	2,925	1,552	331	1,137	5,400	1,909

## VOLUME OF EXPORTS.

The export trade of New South Wales consists to a very large extent of primary products, comparatively few in number, of which quantities, as well as values, are recorded. Therefore, the Customs returns furnish ample data for an approximate measure of changes in the volume of the trade. With the object of ascertaining the extent of the changes in recent years, an index has been compiled from the average values assigned to the principal exports during each year from 1920-21 to 1931-32, the averages for each commodity being "weighted" by the average annual quantity exported during this period of twelve years. Then the following statement of the relative volume of trade in Australian produce (exclusive of bullion and specie) during the period has been prepared by applying the index to the value of the exports as recorded:—

Year.	Relative Volume of Exports of Australian Produce from New South Wales (1920-21 = 100).	Year.	Relative Volume of Exports of Australian Produce from New South Wales (1920-21 = 100).	Year.	Relative Volume of Exports of Australian Produce from New South Wales (1920-21 = 100).
1920-21	100	1926-27	116	1932-33	143
1921-22	125	1927-28	102	1933-34	116
1922-23	97	1928-29	111	1934-35	134
1923-24	80	1929-30	91	1935-36	124
1924-25	101	1930-31	122	1936-37	125
1925-26	109	1931-32	131		

Wool and wheat are the principal items to be considered in relation to the volume of exports. In 1920-21 the export of wool was comparatively light, but there was a large export of wheat. In the following year exports of wool were unusually heavy, and there was an increase in wheat shipments, so that the volume of exports rose by 25 per cent. During the next two years the quantity of wheat was much smaller, and in 1923-24 a general decline in wool and other rural products caused the volume of trade to fall to a level 20 per cent. below the base year. Trade recovered rapidly as a result of a bounteous wheat crop in 1924-25.

Then the wool industry entered upon a period of high productivity so that there was a large export in each of the last ten years, especially in 1926-27 and 1931 to 1937. The quantity was not so great in 1929-30 as in other recent years, and there were only a very small shipment of wheat so that the volume of exports showed a marked decline. Abundance was a feature of the production of staple commodities during the five years 1930-31 to 1934-35, and a steady rise in the volume of trade mitigated to some extent the disastrous effects of the fall in world prices. The volume in 1935-36 was 13 per cent. above the average of the three years 1926-27 to 1928-29 though the latter were all years of active trading.

#### RE-EXPORTS.

The value of re-exports in 1936-37 was £3,382,397, viz., merchandise, £1,297,772, and bullion and specie, £2,084,625. The re-exports to New Zealand were valued at £472,648 and to the South Sea Islands (in which are included New Guinea and Papua) at £476,705.

The principal items of merchandise re-exported in the last five years are shown below:—

Commodity.	Value of Re-exports from New South Wales to Oversea Ports (Australian Currency).				
	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Machinery ... ..	174,759	118,671	116,050	142,611	144,943
Metals and Metal Manufactures	108,405	100,739	135,125	162,520	169,795
Tea ... ..	30,751	38,672	40,868	37,489	44,251
Tobacco, etc. ... ..	71,864	54,943	54,217	72,030	69,618
Whisky ... ..	12,285	30,819	12,701	16,006	25,045
Piece Goods ... ..	50,142	52,683	42,303	55,145	92,613
Films for Cinematographs, etc.	73,539	73,464	65,709	67,150	111,599

#### Oversea Exports—Ships' Stores.

The figures relating to oversea exports, as shown in the foregoing tables, do not include exports in the form of ships' stores. This is an important

branch of the trade of the State, as will be seen from the following statement of the value of ships' stores exported from New South Wales in various years since 1911.

Year ended 30th June.	Oversea Ships' Stores Exported from New South Wales, (Australian Currency).		
	Australian Produce.	Other Produce.	Total.
	£	£	£
1911*	839,700	76,547	916,247
1921	2,028,728	300,969	2,329,697
1926	1,906,153	322,007	2,228,160
1929	1,210,007	84,241	1,294,248
1930	914,943	87,010	1,001,953
1931	787,881	95,942	883,823
1932	717,477	77,343	794,820
1933	797,218	73,609	870,827
1934	792,040	98,797	890,837
1935	815,162	89,514	904,676
1936	870,079	100,349	970,428
1937	887,261	121,406	1,008,667

\* Calendar Year.

#### PRINCIPAL IMPORTS AND EXPORTS OF NEW SOUTH WALES BY COUNTRIES.

Below are given particulars of imports from and exports to the more important British and foreign countries during 1936-37. The values of imports and exports are expressed respectively in British and Australian currencies:—

*United Kingdom.*—Total imports of United Kingdom origin, £15,709,978. Principal items: Whisky, £334,494; apparel, £214,226; textiles, £3,636,846; yarns and manufactured fibres, £414,124; paints and varnishes, £229,886; machinery, £2,740,931; metals and metal manufactures, £3,777,863; crockery, glass and glassware, etc., £362,011; paper, £757,482; stationery and paper manufactures, £562,694; and drugs and chemicals, £682,044.

Total exports to United Kingdom, £18,584,309 (includes re-exports, £180,218): Chief items; Butter, £893,180; eggs in shell, £319,384; wheat £2,729,463; flour, £446,442; fresh fruit, £62,528; dried and preserved fruits, £132,612; frozen beef, £162,454; frozen lamb and mutton, £1,487,408; rabbits and hares, £26,539; wool, £8,834,198; hides and skins, £516,556; leather, £347,243; tallow, £61,252; copper and copper manufactures, £93,840; lead (pig), £1,238,436; tin ingots, £119,820; and bullion and specie, £145,022.

*Irish Free State.*—Total imports of Irish origin, £1,239. Total exports to the Irish Free State, £726,075. Chief item: Wheat, £722,693.

*Canada.*—Total imports of Canadian origin, £2,753,414. Principal items: Fish, £164,009; textiles, £218,449; machinery, £329,891; metals and metal manufactures, £605,190; undressed timber, £450,809; paper, £652,718; and cinematograph films, £88,548.

Total exports to Canada, £830,138 (includes re-exports, £7,153). Chief items: Flour, £17,623; preserved fruits, £120,206; wool, £458,371; hides and skins, £68,327; gelatine and glue, £32,714; tallow, £45,918; and timber, £2,483.

*New Zealand.*—Total imports of New Zealand origin, £653,071. Principal items: Fish, £112,627; hides and skins, £45,297; textiles, £3,431; machinery, £9,111; undressed timber, £100,018; horses, £69,307; wool, £38,289; bullion and specie, £86,344.

Total exports to New Zealand, £3,652,155 (includes re-exports, £472,648). Chief items: Bran, pollard and sharps, £11,328; rice, £17,824; preserved fruits, £42,537; coal, £110,130; timber, £230,228; apparel and textiles, £229,542; drugs and chemicals, £269,837; metals and metal manufactures, £1,138,238; machinery, £401,977; paints and varnishes, £108,217; paper, stationery and paper manufactures, £157,173; rubber and leather and manufactures thereof, £84,394.

*Union of South Africa.*—Total imports of South African origin, £143,673. Principal items: Diamonds, £69,056.

Total exports to South Africa, £134,483 (includes re-exports, £9,741). Chief items: Foodstuffs, £7,877; animal substances not food, £14,107; textiles, £16,091; machinery and metal manufactures, £23,626; rubber and leather, and manufactures thereof, £12,102; and wood and wicker, £17,615.

*India and Ceylon.*—Total imports, £1,986,413. Principal items: Tea, £648,443; hides and skins, £84,625; gums and resins, £11,997; floor coverings, £25,907; piece goods, £138,000; bags and sacks, £521,824; rubber, £194,756; and linseed, £203,979.

Total exports to India and Ceylon, £214,924 (includes re-exports, £5,007). Chief items: Butter, £18,082; milk, cream, etc., £13,625; fruit, £6,369; meats, £10,476; wool, £20,592; tallow, £57,131; coal, £26,812; and machinery and metal manufactures, £5,580.

*Fiji.*—Total imports of Fijian origin, £253,230. Principal items: Foodstuffs, £19,928; copra, £76,370; bullion and specie, £149,065.

Total exports to Fiji, £501,143 (includes re-exports, £81,435). Chief items: foodstuffs, £165,815; tobacco, £42,709; machinery, metals, and metal manufactures, £78,346; paints and varnishes, £9,884; rubber and leather and manufactures thereof, £8,690; and drugs, chemicals, etc., £29,163.

*Hong Kong.*—Total imports of Hong Kong origin, £22,016.

Total exports to Hong Kong, £279,298 (includes re-exports, £319). Chief items: Wheat and flour, £126,066; machinery, metals and metal manufactures, £10,340; leather and manufactures of leather, £38,196.

*Malaya (British).*—Total imports of Malayan origin, £382,706. Principal item: Rubber, £353,398.

Total exports to Malaya, £520,200 (includes re-exports, £18,481). Chief items: Butter, £32,373; milk and cream, etc., £4,055; flour, £303,754; fruit, £14,582; meats, £28,704; leather, £13,594.

*New Guinea and Papua.*—Total imports from New Guinea and Papua, £1,700,139. Principal items: Copra, £130,283; rubber, £36,839; gold, £1,438,793.

Total exports to New Guinea and Papua, £792,025 (includes re-exports, £239,691). Chief items: Butter, £8,714; milk, etc., £7,894; flour, £17,810; biscuits, £18,291; meats, £46,079; coal, £7,291; tobacco, £76,948; apparel, textiles and yarns, £23,559; and machinery, metals and metal manufactures, £205,144.

*Argentina*.—Total imports of Argentine origin, £74,028. Principal item: Linseed, £66,308.

Total exports to Argentina, £9,071.

*Austria*.—Total imports of Austrian origin, £58,480.

Total exports to Austria, £337,088. Chief item: Wool, £334,013.

*Belgium*.—Total imports of Belgian origin, £382,700. Principal items: Apparel, textiles and yarns, £167,091; machinery and metal manufactures, £30,245; earthenware, glass, etc., £83,290; paper, stationery, and paper manufactures, £17,972; and jewellery, fancy goods, etc., £40,411.

Total exports to Belgium, £3,736,337; (includes re-exports, £8,601). Chief items: Oil cake, £14,868; wool, £3,645,594; hides and skins, £27,282.

*China*.—Total imports of Chinese origin, £396,958. Principal items: Tea, £26,435; animal substances not foodstuffs, £42,479; apparel and textiles, £114,954; oils, fats and waxes, £59,013; and linseed, £100,184.

Total exports to China, £213,420 (includes re-exports, £6,019). Chief items: Foodstuffs of animal origin, £60,223; animal substances (mainly unmanufactured), not foodstuffs, £85,883; wood and wicker, raw and manufactured, £14,353.

*Czechoslovakia*.—Total imports, £201,362. Principal items: Apparel, and textiles, £58,328; machinery and metal manufactures, £26,334; earthenware, glassware, etc., £53,472; jewellery, timepieces, etc., £31,917.

Total exports to Czechoslovakia £592,293 (includes re-exports, £337). Chief item: Wool, £591,690.

*France*.—Total imports of French origin, £437,978. Principal items: Apparel and textiles, £102,380; spirituous and alcoholic liquors, £29,042; oils, fats and waxes, £40,113; machinery and metal manufactures, £16,652; paper, stationery and paper manufactures, £15,400; drugs and chemicals, £156,854.

Total exports to France, £3,434,265 (includes re-exports, £21,444). Chief items: Wool, £2,716,739, bullion and specie, £25,737.

*Germany*.—Total imports of German origin, £1,587,567. Principal items: Apparel, textiles and yarns, £196,693; oils, fats and waxes, £16,139; paints and varnishes, £25,358; machinery and metal manufactures, £533,974; earthenware, glassware, etc., £100,907; paper, stationery, and paper manufactures, £118,719; jewellery and fancy goods, £70,709; optical and scientific instruments, £116,329; drugs and chemicals, £230,437.

Total exports to Germany, £2,015,443 (includes re-exports, £15,678). Chief item: Wool, £1,761,883.

*Italy*.—Total imports of Italian origin, £147,432. Principal items: Apparel, textiles and yarns, £55,390; drugs and chemicals, £26,204.

Total exports to Italy, £2,388,776 (includes re-exports, £11,494). Chief items: Wool, £1,116,255; hides and skins, £29,640; and wheat, £1,229,525.

*Japan*.—Total imports of Japanese origin, £1,752,259. Principal items: Fish, £35,008; tea, £11,170; apparel, £71,964; textiles, £1,006,280; yarns, etc., £22,176; machinery and metal manufactures, £133,161; rubber manufactures, £19,191; earthenware, glassware, etc., £81,147; paper, stationery and paper manufactures, £32,920; jewellery, and fancy goods, £83,828; and drugs and chemicals, £18,518.

Total exports to Japan, £4,194,480 (includes re-exports, £36,702). Chief items: Wheat, and flour, £146,921; wool, £3,618,300; hides and skins, £89,254; tallow, £24,076; lead (pig), £128,479; and pig and scrap iron, £76,993.

*Manchukuo*.—Total imports of Manchukuo origin, £10,987.

Total exports to Manchukuo, £50,166. Chief item: Flour, £28,250.

*Netherlands*.—Total imports of Dutch origin, £461,947. Principal items: Spirituous and alcoholic liquors, £13,330; apparel, textiles and yarns £87,936; machinery and metal manufactures, £227,481; drugs and chemicals, £11,185; cocoa, £54,337.

Total exports to the Netherlands, £680,144 (includes re-exports, £18,275). Chief items: Wool, £282,538; wheat, £260,020.

*Netherlands East Indies*.—Total imports, £2,382,312. Principal items: Tea, £874,471; tobacco, £7,356; kerosene, £115,480; crude petroleum, £331,354; petroleum spirit, £702,294; residual oil, £80,366; rubber, £47,870.

Total exports to Netherlands East Indies, £446,583 (includes re-exports, £1,987). Chief items: Butter, £34,285; flour, £256,083; biscuits, £21,639; fruit, £13,051; meats, £15,316; leather, £24,666; coal, £19,466; drugs and chemicals, £16,314.

*New Caledonia*.—Total imports £50,346.

Total exports to New Caledonia, £237,756 (includes re-exports, £40,053). Chief items: Flour, £35,553; other foodstuffs, £46,042; coal, £51,349; coke, £25,598; machinery and metal manufactures, £13,907.

*Norway*.—Total imports of Norwegian origin, £190,025. Principal items: Fish, £51,550; iron and steel, £32,686; and paper, £84,920.

Total exports to Norway, £53,091 (includes re-exports, £2,628).

*Philippine Islands*.—Total imports, £41,599. Principal items: Wood and wicker, £17,472; vegetable substances and unmanufactured fibres, £19,508.

Total exports to the Philippine Islands, £405,085 (includes re-exports, £751). Chief items: Butter, £41,928; flour, £265,839; and coal, £36,138.

*Poland*.—Total imports of Polish origin, £5,887.

Total exports to Poland, £526,830. Chief item: Wool, £525,532.

*Spain*.—Total imports of Spanish origin, £79,014. Principal items: Edible nuts, £4,986; cork and cork manufactures, £40,135; olive oil, £5,570.

Total exports to Spain, £70,872. Chief item: Wheat, £70,528.

*Sweden*.—Total imports of Swedish origin, £402,501. Principal items: Wood pulp, £92,386; machinery and metal manufactures, £100,655; wood and wicker, raw and manufactured, £46,648; paper, £118,506.

Total exports to Sweden, £93,220 (includes re-exports, £2,577). Chief item: Wool, £77,436.

*Switzerland*.—Total imports of Swiss origin, £256,365. Principal items: Grass and straw braids, £33,365; apparel, textiles and yarns, £59,754; machinery and metal manufactures, £45,488; jewellery, timepieces and fancy goods, £78,306; drugs and chemicals, £19,716.

Total exports to Switzerland, £115,263 (includes re-exports, £3,114). Chief item: Wool, £110,495.

*United States of America*.—Total imports, £6,388,743. Principal items: Fish, £23,766; tobacco, £1,209,193; sausage casings, £139,011; foodstuffs of vegetable origin, £36,724; animal substances not foodstuffs, £16,926; apparel, £18,812; textiles, £39,365; kerosene, £39,159; petroleum spirit, £478,448; lubricating oil (mineral), £265,604; residual oil, £16,872; paints

and varnishes, £79,947; machinery and metal manufactures, £2,607,797; rubber manufactures, £41,753; undressed timber, £76,290; glass and glassware, etc., £50,979; paper, £34,065; stationery and paper manufactures, £141,925; jewellery, timepieces and fancy goods, £50,514; optical, surgical and scientific instruments, £341,768; and drugs, chemicals and fertilisers, £267,585.

Total exports to the United States, £10,457,292 (includes re-exports, £2,077,750). Chief items: Wool, £3,309,139; hides and skins, £1,330,829; tallow, £57,303; meats, £87,927; undressed timber, £82,095; and bullion and specie, £5,273,273.

#### CUSTOMS AND EXCISE TARIFFS.

The Australian Customs Tariff provides customs duties under three headings—the British Preferential, the Intermediate, and the General Tariff.

The British Preferential Tariff applies to goods which are wholly produced or wholly manufactured in the United Kingdom. It is also extended to cover goods whose factory or works cost is represented by not less than 75 per cent. of United Kingdom, or United Kingdom and Australia, labour and material; if the goods are scheduled as not commercially manufactured in Australia, the minimum percentage is 25 per cent., and in certain cases 50 per cent. It is an essential condition in either case that the final processes of manufacture take place in the United Kingdom, and that goods are consigned direct to Australia. The benefits of this tariff rate are extended to certain goods the produce of British Crown colonies, protectorates, or territories under British mandate. By separate trade agreements the British Preferential Tariff has been applied to products of the Dominions of Canada and New Zealand and the territories of Papua and New Guinea, except where special duties are provided.

The Intermediate Tariff, which was a feature of the Australian Customs Tariff until 14th October, 1932, was again introduced on 28th November, 1935, in so far as certain items subject to treaty negotiations were concerned, in order to facilitate the implementation of trade agreements. The benefits of the Intermediate Tariff may be extended to any country by proclamation.

Following on the completion in 1936 of trade agreements with Belgium, Czechoslovakia, France and the Union of South Africa, the benefits of the Intermediate Tariff in respect of certain goods were extended to these countries. At the same time the benefits of the Intermediate Tariff under 130 items of the Customs Tariff were extended to 101 other countries (including British non-self-governing countries, protectorates, and mandates) entitled to most-favoured nation treatment.

The General Tariff applies to all importations except those admissible under the British Preferential Tariff and the Intermediate Tariff and those covered by reciprocal agreements.

The present schedule in operation is the Customs Tariff, 1933-36 (which embodies all previous schedules and amendments thereto), as proposed to be amended by the Customs Tariff proposals tabled in the House of Representatives on 24th June, 1937.

#### *Primage Duties.*

A primage duty of 2½ per cent. ad valorem was imposed for revenue purposes from 10th July, 1930, upon almost all goods in addition to duties collected in accordance with the tariff. The rate was increased to 4 per cent. on 6th November, 1930, and to 10 per cent. on most items on 11th

July, 1931. Reduced primage duties on goods under the British Preferential Tariff were introduced on 5th October, 1933, and from 1st December, 1933, goods of New Zealand origin have been exempt from primage.

Under the Customs Tariff, 1933-1936, ad valorem primage duties at rates of 4 per cent., 5 per cent., or 10 per cent. are levied according to the origin and type of goods. Goods the produce or manufacture of Norfolk Island, New Zealand, Fiji, Papua, and the Territory of New Guinea, are exempt from primage duty as are also a number of specified goods for use by primary producers; many machines, tools of trade, and raw materials not manufactured or produced in Australia are also free of primage duty when subject to the British Preferential Tariff. Primage duties at the rates applicable to the British Preferential Tariff are imposed on Canadian goods admissible under the British Preferential Tariff, in accordance with the provisions of the Customs Tariff (Canadian Preference) Act, 1934-1936; also, on proclaimed commodities from British self-governing colonies and protectorates. A limited number of goods admissible under the Intermediate Tariff pay primage duties at a rate equivalent to the British Preferential Tariff rate. As primage duties are imposed for revenue purposes they are reviewed each financial year during the consideration of the budget.

#### *Exchange Adjustment.*

As a result of the world economic depression, the currencies of many countries were depreciated, and international exchange rates fluctuated considerably. Where the exchange rate was unfavourable to Australia, e.g., as between Australia and the United Kingdom, the effect was to give additional protection to Australian industries. The imposition of primage duties on imports in addition to the ordinary duties, and the fall in internal costs of production in Australia had further increased the margin of protection.

The question of adjusting protective duties because of the incidence of exchange was referred by the Minister for Trade and Customs to the Tariff Board for inquiry, and their recommendations regarding exchange adjustment were incorporated in the Tariff (Exchange Adjustment) Act, 1933, which came into force on 5th October, 1933. This Act, as subsequently amended, provides for adjustments in ordinary customs duties (other than primage duty and duty imposed by the Customs Tariff Industries Preservation Act) consequent upon depreciation of Australian currency in relation to the currencies of the countries to which the benefits of the British Preferential Tariff extend. These adjustments are as follows, viz.:—(a) When, at the date of exportation of the goods involved, Australian currency has depreciated to the extent of not less than 16 $\frac{2}{3}$  per cent., a deduction is to be made of one-fourth of the amount of the duty, or one-eighth of the value of the goods for duty, whichever is the less; or (b) when the depreciation is not less than 11  $\frac{1}{9}$ th per cent. and less than 16 $\frac{2}{3}$  per cent. the deduction is to be one-eighth of the amount of the duty or one-sixteenth of the value of the goods for duty, whichever is the less.

Subsequent to the enactment of the Customs Tariff (Exchange Adjustment) Act, 1933, the Tariff Board has adopted the principle of recommending protective rates of duty on the basis of reasonable and adequate protection necessary (a) under existing conditions after provision has been made for protective incidence due to depreciation in the Australian currency; or (b) when exchange rates, Australia on London, are at par.

The Tariff Proposals of 6th December, 1934, gave effect, for the first time, to the new principle of imposing rates of duty as recommended by the Tariff Board as in (a) above. Automatic increases in the rates of duty

are, however, provided for during any stage in which Australian currency appreciates in relation to sterling, and so effect is given to the recommendations of the Tariff Board in (b) above.

Recommendations of the Tariff Board in respect of items carrying protective rates of duty, given effect subsequent to 6th December, 1934, have provided for automatic variations in duties in consonance with fluctuations in the rate of exchange and consequently such items have been removed from the provisions of the Customs Tariff (Exchange Adjustment) Act.

#### *Import Prohibitions.*

On account of adverse trade balances, and for the purpose of promoting greater trade reciprocity within the Empire, restrictions were imposed in May, 1936, on the importation of certain foreign goods which are held to be competitive with goods produced within the Empire. Importation of goods appearing in the restricted lists will be permitted, under license, from those countries with which the balance of trade is favourable, and from all other countries in regard to which although the balance may be adverse to the Commonwealth, the Government is satisfied with the position. The necessary permits to import such goods will, in most cases, be readily issued if application be made at the Customs House at which it is desired to clear the goods.

#### *Ottawa Agreement.*

As a result of the Imperial Economic Conference, held in Ottawa during July and August, 1932, an agreement was made between the Governments of the Commonwealth and the United Kingdom for increased trade preference. The agreement was ratified by the United Kingdom and Australia Agreement Act, 1932, for a period of five years, which period may be extended until the expiration of six months from the date on which notice of termination is given.

Briefly, the Commonwealth agreed that the margin of preference under the British Preferential Tariff for goods imported from the United Kingdom as compared with the most-favoured foreign country should be determined as follows, viz.:—

- (a) a minimum margin of 15 per cent. when such goods are free of duty or are liable to duty not exceeding 19 per cent. ad valorem;
- (b) a minimum margin of 17½ per cent. when the duties exceed 19 per cent. but do not exceed 29 per cent. ad valorem; and
- (c) a minimum margin of 20 per cent. when the duty exceeds 29 per cent. ad valorem provided that the resulting duty will not exceed 75 per cent. ad valorem.

The Commonwealth also undertook to repeal proclamations prohibiting the importation of certain goods, to revoke the special duties of 50 per cent. and to reduce or remove primage as soon as the financial position of Australia would permit. The prohibition of the importation of the goods referred to had been lifted completely by 21st August, 1932, and the special duty of 50 per cent. of the rate in force, imposed from 3rd April, 1930, had been removed from all goods affected by 1st March, 1935.

Prior to the Ottawa Economic Conference, the tariff of the United Kingdom provided preferential customs duties on certain products of British countries. Those commodities which chiefly concerned Australia were dried and preserved fruits, jam, fruit pulp, preserved milk, spirits, wine and sugar. Also the United Kingdom imposed a general ad valorem duty of 10 per cent. on goods of foreign countries. By the Ottawa Agreement increased preference was granted to the Commonwealth, and the list of commodities entitled to preference was extended. The United Kingdom

also undertook that the 10 per cent. ad valorem duty on certain goods should not be reduced except with the consent of the Commonwealth. The more important of these were leather, tallow, canned meat, zinc, lead, barley, flour, meat extracts, sausage casings, and certain dried fruits. The preference in respect of wheat in grain, copper, lead and zinc was conditional upon Australian producers offering these commodities on first sale in the United Kingdom at price not exceeding the world price. With the object of raising the level of wholesale prices of frozen lamb and mutton in the United Kingdom, the two countries agreed to regulate the importation of these commodities.

The Australian Customs Tariff Schedule of 13th October, 1932, provided for marginal preference on goods imported from the United Kingdom, as provided in the Ottawa Agreement, by increasing the existing duty under the General Tariff on many items. This schedule, with alterations made in 1933 and subsequent dates, was embodied in the Customs Tariff Act, 1933-36.

Since 1932, the policy in relation to protective duties has been to act in broad principle in accordance with the recommendations made by the Tariff Board, which is a body constituted to hold public inquiries and receive evidence on oath in respect of trade matters.

#### *Reciprocal Agreements.*

The first Trade Treaty between Canada and Australia was effected in September, 1925. This Treaty was superseded by the Customs Tariff (Canadian Preference) Act, 1931 (assented to on 25th July, 1931), which ratified and confirmed the trade agreement with Canada made at Ottawa on 5th June, 1931. Canada undertook to impose specified duties on certain commodities and to extend to all other goods the benefits of the British Preferential Tariff. Australia agreed to act similarly.

Either country, after three months' notice, may impose General Tariff rates in lieu of the preference rates on goods imported from the other country, when the importation of such goods is detrimental to the sale of similar goods in the importing country.

By the 1931 Act some goods imported from Canada were subject to the Intermediate Tariff then operating. By the Customs Tariff (Canadian Preference) Act, 1934, these goods were made subject to special rates of duties. Amendments have since been made by the Customs Tariff (Canadian Preference) Act, 1936.

An agreement for mutual trade preference was made between Australia and New Zealand in 1922 and was replaced by a new agreement in 1933. Australia agrees not to impose duties on free goods nor to increase customs rates on certain dutiable goods except with the consent of New Zealand or after six months' notice. New Zealand agrees to act similarly. In each Dominion the rates under the British Preferential Tariff are applicable to commodities not specified in the agreement. Where the British Preferential rate on any non-scheduled article is less in the exporting Dominion than the British preferential rate in the importing Dominion, then a request may be made that the latter rate shall be reduced to the former within three months. Primage duty is not chargeable on goods imported from New Zealand into Australia, but imports to New Zealand from Australia are liable to primage provided the rate does not exceed that charged on similar importations from the United Kingdom. New Zealand has also undertaken to abolish primage on Australian goods as soon as her finances permit.

The agreement is given effect by the Customs Tariff (New Zealand Preference) Act, 1933-1934, and may be terminated by either country after six months' notice.

The Customs Tariff (Papua and New Guinea Preference) Act, 1936, repealed the Act of 1934, and admitted to Australia, free of duty, certain products of New Guinea and Papua if imported direct from those territories. The chief products affected are cocoa beans, coffee, ginger, coconuts, sago, tapioca, kapok and sesame seeds, vanilla beans, and certain spices and gums.

Reciprocal trade agreements have been concluded with Belgium, Czechoslovakia, France and the Union of South Africa.

An informal agreement relating to trade between Japan and Australia came into effect on 1st January, 1937. Japan repealed the ordinance promulgated on 15th June, 1936, restricting imports from Australia, cancelled the surtax of 50 per cent. ad valorem, and undertook to permit the importation to Japan of not less than 800,000 bales of Australian wool during the period 1st January, 1937, to 30th June, 1938. Australia undertook to remove primage duty from certain cotton and artificial piece goods, to reduce the duty on these goods under the intermediate tariff and to permit the importation to Australia, during the period 1st January, 1937, to 30th June, 1938, of 76,875,000 square yards of cotton piece goods (other than calico for bag-making) and 76,875,000 square yards of artificial silk piece goods at the rate of 51,250,000 square yards per annum for each class of goods.

#### *Industries Preservation Act.*

The Customs Tariff (Industries Preservation) Act, 1921-1933, provides that a special dumping duty may be imposed on goods exported to Australia which are of a class or kind produced or manufactured in Australia, at a price less than the fair market price for home consumption at the time of shipment, or at less than a reasonable price when the importation of such goods is detrimental to an Australian industry. The duty imposed is the amount by which the export selling price to Australia is less than the fair market value or the reasonable price, as the case may be. Goods sold on consignment are dealt with somewhat similarly. A dumping freight duty may also be imposed on goods carried to Australia either free of freight or at reduced rates of freight. The amount of the dumping duty in such cases is equal to the extent of the freight concession granted.

The Act also provides that the Minister of Trade and Customs, after inquiry by the Tariff Board, may impose an exchange dumping duty on goods imported from a country whose currency has depreciated in relation to Australian currency, if the sale of these goods by reason of such depreciation is detrimental to an Australian industry. The amount of the duty may be derived from the formula  $\frac{a-b}{b} \times c$  where  $a$  is the nominal par value in sterling of a unit of the currency of the country of origin,  $b$  the value in Australian currency of the same unit at date of exportation, and  $c$  the value for duty of the goods assessed in accordance with the Customs Act, 1901-1936. When dumping duties (except exchange dumping duties) are calculated in any currency other than Australian currency the amount of dumping duty is payable in Australian currency, ascertained according to a fair rate of exchange, such rate to be declared in cases of doubt by the Minister.

#### *Sales Tax.*

Since 1st August, 1930, imports into Australia as well as local secondary products have been subject to the Sales Tax. The rate was  $2\frac{1}{2}$  per cent. from 1st August, 1930; 6 per cent. from 11th July, 1931; 5 per cent. from 26th October, 1933; and 4 per cent. from 11th September, 1936. Certain goods are exempt.

The Sales Tax Assessment (Fiji Imports) Act, 1934, exempted from sales tax certain goods imported to Australia from Fiji, if not produced in Australia, or which, if produced, are exempt from tax. These goods are also exempt from primage duty.

### Excise Tariffs.

The Excise Tariff of 1921 imposed duties upon beer, spirits, amylic alcohol, fusel oil, saccharin, starch made from imported rice, tobacco, cigars, cigarettes and snuff. The duty on starch was repealed on the 24th March, 1927. The Excise Tariff 1921-1936, which is at present operative, incorporates the above items, and levies duties upon petroleum and shale products, playing cards, concentrated grape must, cigarette tubes and papers, matches, wine and valves for wireless telegraphy and telephony.

### CUSTOMS AND EXCISE REVENUE.

The following statement shows the net amount of customs and excise revenue collected in New South Wales under each division of the tariff during the various years since 1910-11. Sydney is an important distributing centre, and the collections include receipts on account of goods which were transferred for consumption in other States. A notable instance is the excise collected in New South Wales on cigarettes made locally, though more than half the output of the factories is subsequently exported interstate. On the other hand, the receipts do not include duties on goods from other States consumed in New South Wales:—

Tariff Division.	1910-11.	1920-21.	1930-31.	1935-36.	1936-37.
<b>Customs—</b>	£	£	£	£	£
Stimulants, Ale, Beer, etc. ...	1,109,212	832,473	556,789	647,253	660,760
Narcotics ... ..	506,426	1,013,007	2,104,793	2,086,291	2,202,425
Sugar ... ..	67,438	1,206	381	497	2,421
Agricultural Products and Groceries ... ..	354,855	339,997	492,401	627,105	691,837
Apparel and Textiles ... ..	822,576	2,626,199	874,054	1,095,304	1,171,675
Metals and Machinery ... ..	477,766	2,050,953	692,670	1,037,190	1,021,881
Oils, Paints, and Varnishes ... ..	92,800	231,733	1,301,318	2,405,251	2,652,073
Earthenware, etc. ... ..	128,593	276,091	157,686	199,156	219,218
Drugs and Chemicals ... ..	42,350	214,132	178,889	145,765	136,889
Wood, Wicker, etc. ... ..	156,632	214,043	149,236	154,590	323,469
Jewellery and Fancy Goods ... ..	120,335	395,041	339,502	257,124	271,024
Leather and Rubber ... ..	110,351	284,894	152,823	198,024	198,525
Paper and Stationery ... ..	83,521	490,762	360,868	216,458	217,572
Vehicles ... ..	66,317	361,343	120,710	571,193	759,001
Musical Instruments ... ..	50,707	112,997	6,680	9,155	16,331
Miscellaneous ... ..	104,395	323,468	318,290	431,681	409,395
Primage Duty ... ..	...	...	777,952	1,979,021	1,729,429
Other Receipts ... ..	12,678	29,043	70,570	107,560	114,097
<b>Total, Customs ...</b>	<b>£ 4,306,052</b>	<b>9,707,982</b>	<b>8,746,162</b>	<b>12,138,588</b>	<b>12,804,622</b>
<b>Excise—</b>					
Beer ... ..	210,728	2,019,397	1,903,032	2,033,792	2,260,704
Spirits ... ..	119,169	677,537	485,093	642,614	645,479
Tobacco ... ..	188,763	586,760	752,745	1,003,831	1,713,143
Cigars ... ..	958	18,072	1,766	1,361,908	1,454,521
Cigarettes ... ..	250,093	1,721,252	1,381,984		
Cigarette Papers ... ..	...	...	...	65,739	92,669
Matches ... ..	...	...	...	23,473	29,483
Playing Cards ... ..	...	...	6,645	6,150	6,942
Sugar ... ..	261,758	...	...	...	...
Petrol ... ..	...	...	220,272	448,933	490,174
Wireless Valves ... ..	...	...	...	24,000	66,017
Other ... ..	507	...	...	...	...
Licenses—Tobacco, etc. ... ..	2,259	4,479	3,714	4,242	3,722
<b>Total, Excise ...</b>	<b>£ 1,034,235</b>	<b>5,027,497</b>	<b>4,755,251</b>	<b>6,254,682</b>	<b>6,763,054</b>
<b>Total, Customs and Excise</b>	<b>£ 5,341,187</b>	<b>14,825,479</b>	<b>13,501,413</b>	<b>18,393,270</b>	<b>19,567,676</b>
<b>Per head of population ...</b>	<b>£ s. d. 3 5 2</b>	<b>£ s. d. 7 1 10</b>	<b>£ s. d. 5 6 1</b>	<b>£ s. d. 6 18 6</b>	<b>£ s. d. 7 5 11</b>

The net customs collections amounted, on an average, to £14,000,000 per annum during the four years ended 30th June, 1930. In 1930-31 the amount—apart from primage—was only £8,000,000 and it declined to £7,000,000 in the following year. The corresponding amounts in the last five years were £7,397,000, £8,170,000, £9,315,000, £10,160,000, and £11,075,193. There were increases during the year ended 30th June, 1937, in all tariff divisions except metals and machinery, drugs and chemicals, and the miscellaneous group.

Excise revenue declined after 1928-29, but has more than regained its former level, decreases in collections on intoxicants being offset by higher duties on tobacco and new duties, such as on cigarette papers. In 1936-37 the excise collections on intoxicants and on tobacco, cigars and cigarettes were £2,906,183 and £3,260,533 respectively, as compared with £3,236,786 and £2,646,801 in 1928-29.

The amount of customs and excise revenue obtained from duties on stimulants, etc., and narcotics was £8,878,789 or £3 11s. 6d. per head of population in 1928-29, £7,546,249 or £2 17s. 9d. per head in 1933-34, £7,921,541 or £3 0s. 1d. per head in 1934-35, £8,380,689 or £3 3s. 1d. per head in 1935-36, and £8,943,032 or £3 6s. 8d. per head in 1936-37.

#### INTERSTATE TRADE.

At a conference of the Statisticians of Australia in 1930 it was resolved that steps be taken to publish statistics in respect of interstate trade. With this object in view the following summary has been compiled from data obtained from the Maritime Services Board, the railway authorities of New South Wales, Victoria, and South Australia, and persons and firms engaged in interstate trade. The figures are not complete, but probably represent the bulk of the interstate consignments of the products specified:—

Commodity.	Interstate Imports.			Interstate Exports.		
	1934-35.	1935-36.	1936-37.	1934-35.	1935-36.	1936-37.
Wheat ... .. centals.	1,400	17,200	*	1,360,000	3,216,000	*
Flour ... .. "	142,600	137,300	*	634,000	491,400	*
Oats† ... .. "	36,600	39,155	29,479	*	*	*
Maize ... .. "	295,500	184,776	103,685	*	*	*
Barley ... .. "	104,800	167,708	208,126	*	*	*
Potatoes ... .. cwt.	1,446,900	1,316,305	1,669,840	84,400	60,628	105,516
Onions ... .. "	450,700	467,368	444,410	500	2,616	3,346
Butter ... .. lb.	2,961,300	5,550,100	5,808,488(e)	3,974,100(b)	2,814,400	1,836,744(c)
Cheese ... .. "	2,647,600	3,567,508	3,941,426	*	*	*
Bacon and Ham ... .. "	8,645,100(a)	9,287,206	8,936,788	665,400†	869,218†	*
Eggs—In shell ... .. doz.	1,848,300	1,205,580	968,390	*	*	*
Egg Pulp§ ... .. cub. tons	900	941	877	*	*	*
Wool ... .. lb.	15,347,800	18,142,360	20,286,600	82,255,700	75,785,232	79,653,500
Sheep ... .. No.	1,069,600	1,256,552	1,209,780	1,920,600	2,571,101	2,668,933
Horses ... .. "	18,600	15,556	16,970	8,300	7,057	7,394
Cattle ... .. "	177,300	191,433	189,946	99,000	100,534	120,780
Coal—Cargo ... .. tons	*	*	*	1,631,100	1,647,397	1,900,028
Bunker ... .. "	*	*	*	395,000	354,380	404,996
Tobacco** ... .. lb.	614,400	600,588	592,420	1,912,300	2,097,319	2,695,250
Cigars** ... .. "	37,300	44,922	51,798	21,200	9,843	15,590
Cigarettes** ... .. "	365,000	398,547	430,930	2,147,200	2,292,990	2,463,495

\* Not available.

† Excluding arrivals at Newcastle.

‡ Exports by principal firms.

§ Imports into Sydney only. \*\* Excluding movements in bond.

(a) Imports into Sydney and Newcastle. (b) Includes butter sent to Brisbane for overseas export.

(c) Excluding movement by road.

The imports of maize, dairy products, and cattle are obtained mainly from Queensland. Potatoes, onions, barley and oats are imported from Victoria, potatoes and oats from Tasmania, and large quantities of fresh fruits from all three States. Exports of wheat and flour from New South Wales consist to a large extent of consignments from the southern districts to Victoria; wheat is exported also to Queensland; Victoria is the main outlet for sheep and cattle, and Western Australia for butter, except in 1934-35, when a large quantity was exported to Queensland to be shipped overseas at Brisbane. Coal is exported to all the States except Queensland, and some is re-exported from South Australia to Broken Hill.

Further information relating to the interstate trade with Tasmania, Western Australia, and South Australia, as shown below, has been compiled by the Statisticians of those States, the South Australian records being complete only so far as the items could be traced.

Principal Items of Interstate Trade.	1933-34.		1934-35.		1935-36.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
<i>South Australia.</i>						
<b>Imports from New South Wales—*</b>		£		£		£
Ores from Broken Hill—						
Granular and Slime Concentrates ... ..	tons	235,447	2,250,235	242,744	2,996,035	242,850
Zinc Concentrates ... ..	tons	55,747	83,620	62,428	98,642	65,661
Coal ... ..	tons	417,520	532,338	433,675	520,410	489,012
Butter ... ..	lb.	618,744	29,317	112,000	7,618	392,000
Sheep ... ..	No.	77,260	†	86,146	†	86,294
Wool ... ..	lb.	13,404,007	832,426	14,723,400	558,017	13,886,518
<b>Exports to New South Wales—*</b>						
Lead ... ..	tons	51,682	679,560	66,789	852,456	65,812
Iron ore ... ..	tons	833,792	958,861	1,355,096	1,558,360	1,295,207
Motor bodies ... ..	No.	2,572	268,626	3,307	367,752	12,098
Coal (to Broken Hill) ... ..	tons	7,037	8,972	7,505	9,006	10,361
Brandy ... ..	...pf. gal.	60,248	51,936	71,973	53,980	82,851
Wine ... ..	gal.	794,549	107,225	832,022	223,777	815,474
<i>Western Australia.</i>						
<b>Imports from New South Wales—</b>		£		£		£
Butter ... ..	lb.	1,858,802	99,617	973,316	66,834	1,082,544
Confectionery ... ..	...	1,436,965	107,545	1,789,234	121,882	1,905,565
Sugar ... ..	tons	630	22,672	807	20,186	621
Tobacco, manufactured ... ..	lb.	556,302	203,337	496,619	190,874	477,842
Cigarettes ... ..	...	285,805	267,136	285,580	269,743	284,772
Apparel and textiles ... ..	...	...	385,168	...	404,790	...
Coal ... ..	tons	78,152	98,463	50,085	55,869	50,893
Machinery ... ..	...	...	327,873	...	411,783	...
Metal manufactures ... ..	...	...	709,945	...	839,093	...
Rubber manufactures ... ..	...	...	159,063	...	128,224	...
Drugs, chemicals, and fertilisers ... ..	...	...	238,046	...	246,580	...
Total Imports from New Sth. Wales	...	3,344,638	...	3,556,680	...	3,912,233
Total Exports to New South Wales	...	267,252	...	337,933	...	407,751
<i>Tasmania.</i>						
<b>Imports from New South Wales—</b>		£		£		£
Sugar ... ..	tons	11,232	361,075	12,280	372,947	12,268
Tobacco, cigars, and cigarettes ... ..	...	...	118,762	...	107,772	...
Machinery and metal manufactures ... ..	...	...	315,181	...	437,190	...
Total Imports from New Sth. Wales	...	1,724,250	...	1,951,164	...	2,146,637
<b>Exports to New South Wales—</b>						
Fruits—Fresh ... ..	bush.	1,339,966	298,038	1,124,857	241,823	873,129
Preserved, pulped ... ..	lb.	5,713,560	82,056	6,421,015	84,755	5,610,761
Jams and jellies ... ..	...	6,899,035	158,203	8,728,525	168,865	5,153,000
Potatoes ... ..	tons.	60,140	346,482	56,632	442,306	49,085
Copper (blister) ... ..	...	7,898	253,225	10,958	291,698	11,660
Zinc ... ..	...	19,011	362,227	27,866	431,731	21,151
Other metals and ores ... ..	...	3,850	238,889	2,870	289,404	4,174
Woolen manufactures ... ..	...	...	205,672	...	297,156	...
Total Exports to New South Wales	...	2,573,838	...	2,937,761	...	3,009,594

\* As far as recorded.

† Not available.

## SHIPPING.

Owing to the geographic position of New South Wales, efficient transport services are essential to maintain regular and speedy communication with other countries, and to place the staple products upon distant markets in a satisfactory condition without unduly increasing the cost. In modern ships special provision is made for refrigerated cargoes, and improved methods of carrying perishable products have promoted the growth of a permanent export trade in such commodities as butter, frozen meat, and fruit.

## CONTROL OF SHIPPING.

Prior to the inauguration of the Commonwealth in 1901, the shipping of New South Wales was regulated partly by an Imperial enactment, the Merchant Shipping Act, 1894, and partly by the laws of the Parliament of New South Wales. Under the Commonwealth Constitution the Federal Parliament is empowered to make laws with respect to trade and commerce with other countries and among the States, including navigation and shipping, and in relation to such matters as lighthouses, lightships, beacons and buoys, and quarantine.

Special legislation relating to navigation and shipping is contained in the Federal Navigation Act, 1912-35. It is drafted on the lines of the Merchant Shipping Act and of the Navigation Act of New South Wales and embodies the rules of the international conventions for Safety of Life at Sea.

The provisions of the Act apply to ships registered in Australia, also to other British ships on round voyages to or from Australia. The Governor-General may suspend its application to barges, fishing boats, pleasure yachts, missionary ships, or other vessels not carrying passengers or goods for hire; and the High Court of Australia has decided that clauses relating to manning, accommodation, and licensing do not apply to vessels engaged in purely intra-state trade.

A ship may not engage in the coasting trade of Australia unless licensed to do so, and a license may not be granted to a ship in receipt of a foreign subsidy. Licensees, during the time their ships are so engaged, are obliged to pay to the seamen wages at current rates ruling in Australia, and, in the case of foreign vessels, to comply with the same conditions as to manning and accommodation of the crew as are imposed on British ships. Power is reserved to the Marine Administration to grant permits, under certain conditions, to unlicensed British ships to engage in the coasting trade if a licensed British ship is not available for the service, or if the service by licensed shipping is inadequate. A permit may be continuing, or for a single voyage.

The Governor-General has suspended by proclamation under section 7 of the Act the operations of the foregoing provisions in regard to trade between Australia and the Northern Territory, Nauru, Norfolk Island, New Guinea, and Papua. Provision is made in the Navigation Act, 1935, under the section quoted, that a British ship of not less than 10,000 tons gross tonnage and a sea speed of not less than 14 knots may carry passengers without break of journey from one port in Australia to another with which the port of embarkation is not connected by rail.

The part of the Navigation Act which relates to pilotage has not been brought into operation, and this service is regulated under the State Navigation Act of 1901-1935.

Prior to 1st February, 1936, the State Department of Navigation exercised administrative control over the ports of New South Wales, other than the port of Sydney, and administered the Harbour and Tonnage Rates Act, 1920, which authorised the collection of harbour and tonnage rates at ports other than Sydney, the control of that port being vested in the Sydney Harbour Trust. By the Maritime Services Act, 1935, which came into operation on 1st February, 1936, the functions of these bodies became vested in the Maritime Services Board of New South Wales, which consists of five Commissioners, all appointed by the Government. Of these, two representing shipping and commercial interests, devote only a portion of their time to the work of the Board. Also, as provided in the Act, an Advisory Committee has been appointed for the port of Newcastle to advise the Board in respect of that port. It consists of five members, all appointed by the Government: the chairman is nominated by the Board, and the remaining four are representative of interests concerned with the administration of the port.

Matters relating to seaboard quarantine are administered by the Commonwealth in terms of the Quarantine Act, 1908-24, and arrangements have been made with the State Government to aid in carrying out the law relating to animal and plant quarantine. The Act defines the vessels, persons, animals, plants, and goods which are subject to quarantine, and provides for examination, detention, and segregation in order to prevent the introduction or spread of diseases or pests. Imported animals or plants may not be landed without a permit granted by a quarantine officer. The master, owner, and agent of a vessel ordered into quarantine are severally responsible for the expenses, but the Commonwealth Government may undertake to bear the cost in respect of vessels trading exclusively between Australasian ports. Quarantine expenses in the case of animals and goods are defrayed by the importer or owner.

Vessels arriving from overseas ports are examined by a quarantine officer at the first port of call in Australia. If the vessel (certain South Pacific Island ports excepted) is less than fourteen days from the last overseas port of call it is again inspected at the next port of call. The quarantine station of New South Wales is situated in Sydney Harbour, near the entrance to the port.

The liability of shipowners, charterers, etc., in regard to the transportation of goods is defined by the Sea-carriage Acts passed by the State and the Commonwealth Parliaments. The State Act passed in 1921 applies to the intra-state trade, and the Commonwealth Act of 1924 applies to the interstate and the outward overseas trade.

#### INTERSTATE AND OVERSEA SHIPPING.

The figures in this chapter relating to shipping are exclusive of particulars concerning ships of war, cable-laying vessels, and yachts, which are not included in the official shipping records. Where tonnage is quoted it is net tonnage.

#### *Vessels Entered and Cleared.*

In compiling the records of overseas and interstate shipping, a vessel is treated as an entry once and as a clearance once for each voyage to and from New South Wales, being entered at the first port of call, and cleared at the port from which it departs. The repeated voyages of every vessel are included.

The aggregate number and tonnage of interstate and oversea vessels which arrived in and departed from ports of New South Wales in various years since 1901, with the average net tonnage per vessel, are shown in the following statement:—

Year ended 30th June.	Entries.		Clearances.		Average Tonnage per Vessel.
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	
1901*	2,760	4,133,200	2,853	4,274,101	1,498
1911*	3,127	6,822,135	3,146	6,833,782	2,177
1921	3,019	7,123,331	3,023	7,122,209	2,358
1926	2,945	8,534,292	2,906	8,495,031	2,910
1929	2,865	8,516,413	2,847	8,532,023	2,985
1930	2,623	8,258,562	2,600	8,187,996	3,149
1931	2,517	7,938,164	2,568	8,008,827	3,118
1932	2,420	7,838,949	2,451	7,859,067	3,223
1933	2,648	8,781,550	2,648	8,741,934	3,309
1934	2,609	8,625,302	2,633	8,735,148	3,312
1935	2,978	9,643,138	2,977	9,671,251	3,243
1936	2,965	9,826,765	2,943	9,784,413	3,319
1937	3,178	10,569,260	3,165	10,539,623	3,328

\* Year ended 31st December.

The tonnage of vessels entered and cleared in 1926-27 was 18,297,795 tons. It declined by 5 per cent. in the following year, when there was a smaller quantity of wheat available for oversea export and a marked diminution in the coal trade. There was a further decline in the next two years, mainly in interstate trade due to dislocations in the coal-mining industry, and in 1929-30 only a small quantity of wheat was exported overseas. A reduction in the import trade in 1930-31 and 1931-32 was offset for the most part by a heavy volume of exports. With an increase in exports and some improvement in the import trade the tonnage in 1932-33 approached the high level of 1926-27, but it declined in the following year when the wheat trade was dull. The oversea trade increased in each of the following years and in 1936-37 the tonnage aggregated 21,108,883 tons, exceeding the record of the previous year by 1,497,705 tons.

Approximately 10 per cent. of the shipping entered arrives in ballast. During the past ten years the percentage in ballast was greatest in 1926-27, when it was 13.1 per cent. of the total entered, and lowest in 1929-30, when it was only 5.6 per cent. In 1936-37 the number of vessels entered in ballast was 385, with an aggregate tonnage of 800,475 tons, or 7.6 per cent. of the total. Corresponding figures for 1935-36 were 304 vessels, aggregate tonnage 627,873, or 6.4 per cent. of the total entered.

On the average 6 per cent. of the vessels cleared leave in ballast. The proportion during the past ten years was greatest in 1926-27, when it was 7.4 per cent., and lowest in 1934-35, at 4.5 per cent. In 1936-37, 222 vessels cleared in ballast, with an aggregate tonnage of 635,443 tons, or 6.3 per cent. of the total tonnage cleared, and in 1935-36, 171 with an aggregate tonnage of 485,481 tons.

During each of the past ten years the number of vessels cleared with cargo has been greater than the number entered, as has also the aggregate tonnage. The greatest tonnage cleared with cargo was 9,904,180 in 1936-37 for 2,943 vessels which represented 94 per cent. of the shipping cleared during that year. The tonnage entered with cargo in this year was 9,769,174 for 2,793 vessels, or 92.4 per cent. of the total.

During the last thirty years the average tonnage of vessels trading with New South Wales has more than doubled. In 1901 the average tonnage was 1,498 tons, 2,177 in 1911, 2,358 in 1921, 2,910 in 1926, 3,118 in 1931, 3,319 in 1936, and 3,328 in 1937.

Few sailing vessels are now engaged in the trade of New South Wales. In 1923-24 the number entered was 56, with an aggregate tonnage of 73,466, and the number cleared 66, with a tonnage of 88,260. In 1933-34 one sailing vessel of 2,365 tons was recorded as an entry and clearance, in 1935-36 two sailing vessels of 305 tons, and in 1936-37 four were entered with an aggregate tonnage of 389 tons and two cleared with tonnage of 365 tons. There were no entries or clearances of sailing vessels in 1934-35.

A comparison of the shipping of the Australian States shows that the tonnage trading to and from New South Wales is far in excess of the figures of any other State. The following statement shows the entries and clearances during the year ended 30th June, 1937, excluding the coastal trade:—

State.	Interstate and Oversea.			
	Entries.		Clearances.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
New South Wales ... ..	3,178	10,569,649	3,165	10,539,623
Victoria ... ..	2,848	8,098,613	2,849	8,070,031
Queensland ... ..	1,127	4,139,230	1,135	4,165,959
South Australia ... ..	1,377	5,292,239	1,400	5,354,141
Western Australia ... ..	755	3,729,523	761	3,753,586
Tasmania ... ..	1,317	2,092,947	1,348	2,124,687
Northern Territory ... ..	100	125,840	104	122,505

#### DIRECTION OF SHIPPING TRADE.

The shipping records do not disclose the full extent of communication between New South Wales and other countries, as they relate only to terminal ports and are exclusive of the trade with intermediate ports, of which some are visited regularly by many vessels on both outward and inward journeys. But the following statement of the tonnage entered from and cleared for interstate ports and oversea countries, grouped according to geographical position, indicates, as far as practicable, the growth or decline of shipping along the main trade routes since 1920-21:—

Destination.	1920-21.		1930-31.		1935-36.		1936-37.	
	Ves-sels.	Net Tonnage.	Ves-sels.	Net Tonnage.	Ves-sels.	Net Tonnage.	Ves-sels.	Net Tonnage.
Australian States ... ..	3,206	6,382,297	3,104	8,076,145	3,697	10,172,516	4,224	11,800,610
New Zealand ... ..	769	1,473,057	346	901,695	359	1,056,075	386	1,476,790
U. Kingdom and Europe ...	582	2,798,459	594	3,499,002	720	4,188,013	631	3,675,111
Africa ... ..	81	225,856	16	50,294	28	102,083	16	50,941
Asia and Pacific Islands ...	1,099	2,179,040	601	2,129,777	757	2,448,460	775	2,589,686
North and Central America ...	299	1,008,137	297	1,269,104	343	1,631,893	307	1,505,129
South America ... ..	96	183,094	7	20,374	4	11,220	4	11,005
Total ... ..	6,042	14,245,540	5,115	15,946,991	5,908	19,611,178	6,343	21,109,272

Shipping to and from the other Australian States in 1936-37 was greater by 5,418,313 tons than in 1920-21, and it has risen by 3,724,465 tons since 1930-31. A decrease was recorded in respect of the New Zealand trade in 1935-36, but increases of 3,733 tons and 575,095 tons in comparison with 1920-21 and 1930-31 respectively were shown in 1936-37. The figures relating to New Zealand do not include the tonnage of vessels which called at New Zealand ports en route to and from America. The tonnage engaged in trade with North and Central America has increased by over 62 per cent. The South American trade, which was mainly for the export of coal, has lost its former importance, and trade with Asia and Pacific Islands has been fairly constant.

## INTERSTATE AND OVERSEA CARGOES.

A comparative statement of the interstate and oversea cargoes discharged and shipped in New South Wales in each year since 1926-27 is shown below:—

Year ended 30th June	Cargo Discharged.					Cargo Shipped.				
	Interstate.		Oversea.		Total.	Interstate.		Oversea.		Total.
	Tons Weight.	Tons Measure-ment.	Tons Weight.	Tons Measure-ment.		Tons Weight.	Tons Measure-ment.	Tons Weight.	Tons Measure-ment.	
	000's omitted.									
1927	1,335	430	853	1,343	3,964	3,315	399	1,676	249	5,639
1928	1,208	510	939	1,317	3,980	2,883	456	1,117	277	4,682
1929	1,260	618	970	1,315	4,163	1,978	541	1,307	294	4,120
1930	993	517	1,046	1,129	3,685	1,316	489	608	266	2,679
1931	846	348	662	539	2,395	1,681	370	1,665	253	3,036
1932	775	327	603	458	2,168	1,575	394	1,670	243	3,882
1933	1,171	395	780	567	2,863	1,878	419	1,985	271	4,253
1934	1,400	467	772	713	3,362	1,970	492	1,114	270	3,346
1935	2,080	523	859	912	4,324	2,225	542	1,477	341	4,585
1936	2,053	611	985	990	4,048	2,390	607	1,533	302	4,332
1937	2,450	629	1,069	1,061	5,218	2,733	674	1,520	339	5,266

NOTE.—One ton by measure = 40 cubic feet.

There was an increase in the inward trade in 1933-34 and a general increase in both inward and outward trade each year since.

Cargoes from other States of the Commonwealth which declined by 41 per cent. between 1928-29 and 1931-32, have regained their former level. Oversea import trade which had declined steeply in 1930-31 is still 6.8 per cent. lower than in 1928-29, although the position has improved each year since 1932-33. Fluctuations in the coal trade have been the main cause of variations in the outward interstate trade. Oversea shipments were exceptionally small in 1929-30, when only a small quantity of wheat was exported. There was a recovery in 1930-31, which was sustained until 1933-34 when there was a decline in wheat shipments. An increase was shown in 1934-35 and the improvement has continued each year since. Cargo shipped in 1936-37 amounted to 5,266,246 tons, the highest total since 1926-27.

## NATIONALITY OF VESSELS.

The majority of the vessels engaged in the trade of New South Wales are under the British flag, the deep-sea trade with the mother country and British possessions being controlled chiefly by shipowners of the United Kingdom, and the interstate trade by Australian shipping companies. In the table below the British and the foreign shipping are shown under distinctive headings.

Year ended 30th June.	Net Tonnage Entered and Cleared.				Percentage.		
	Australian.	Other British.	Foreign.	Total.	Australian.	Other British.	Foreign.
1901*	3,348,502	3,714,217	1,344,582	8,407,301	39.8	44.2	16.0
1911*	4,645,195	6,594,649	2,416,073	13,655,917	34.0	48.3	17.7
1921	4,739,555	6,739,914	2,766,071	14,245,540	33.3	47.3	19.4
1929	4,656,402	9,247,088	3,144,946	17,048,436	27.3	54.3	18.4
1930	4,338,726	8,785,023	3,322,809	16,446,558	26.4	53.4	20.2
1931	4,639,497	7,930,626	3,376,868	15,946,991	29.1	49.7	21.2
1932	4,310,726	7,925,935	3,491,365	15,698,016	27.5	50.5	22.1
1933	4,977,758	8,491,453	4,054,273	17,523,484	28.4	48.5	23.1
1934	5,356,820	8,260,853	3,742,777	17,360,450	30.8	47.6	21.6
1935	6,176,918	9,057,063	4,080,408	19,314,389	32.0	46.9	21.1
1936	6,094,412	9,458,820	4,057,946	19,611,178	31.6	48.2	20.2
1937	7,279,007	9,806,475	4,023,790	21,109,272	34.5	46.5	19.0

\* Year ended 31st December.

The marked decline in Australian tonnage in 1928-29 was due partly to the fact that fewer vessels were engaged in the interstate coal trade, and partly to the cessation of regular oversea voyages by Australian vessels as a result of the sale of the Commonwealth Government steamers. This event is reflected in an increase in "other British" tonnage in the same year. After 1928-29 the Australian tonnage fluctuated with an upward tendency and has increased absolutely and relatively during the last five years. The proportion of other British tonnage shows a tendency to decline, and the proportion of foreign tonnage, which had been increasing slowly for some years, declined slightly between 1933 and 1937.

Particulars relating to the nationality of vessels engaged in trade with New South Wales in 1928-29, 1935-36 and 1936-37 are shown in greater detail in the following statement:—

Nationality of Shipping.	Entries and Clearances.						Net Tonnage— Percentage of each Nationality.		
	1928-29.		1935-36.		1936-37.		1928-29	1935-36	1936-37
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.			
<b>British—</b>									
Australia ...	2,651	4,656,402	2,983	6,094,412	3,352	7,279,007	27.3	31.1	34.5
New Zealand ...	421	867,578	285	500,114	360	1,017,867	5.1	3.0	4.8
United Kingdom ...	1,573	7,799,698	1,444	8,094,699	1,517	8,160,362	45.8	41.3	38.6
Other British ...	202	579,812	219	774,007	170	628,246	3.4	3.9	3.0
<b>Total ...</b>	<b>4,847</b>	<b>13,903,490</b>	<b>4,931</b>	<b>15,553,232</b>	<b>5,399</b>	<b>17,085,482</b>	<b>81.6</b>	<b>79.3</b>	<b>80.9</b>
<b>Foreign—</b>									
Denmark ...	13	36,140	15	58,501	16	57,996	.2	.3	.3
France ...	110	235,785	125	230,959	105	160,567	1.4	1.2	.7
Germany ...	104	443,792	111	455,016	122	509,985	2.6	2.3	2.4
Italy ...	38	161,890	16	90,300	28	153,796	1.0	.5	.7
Netherlands ...	99	506,766	88	424,996	111	518,329	3.0	2.2	2.5
Norway ...	97	344,942	167	714,027	170	735,334	2.0	3.6	3.5
Sweden ...	56	175,349	69	235,273	55	196,620	1.0	1.2	.9
Japan ...	200	698,986	246	962,046	206	858,765	4.1	4.9	4.1
United States of America ...	140	517,414	116	805,542	97	712,288	3.0	4.1	3.4
Other Nationalities ...	8	23,882	24	81,296	34	120,110	.1	.4	.6
<b>Total ...</b>	<b>865</b>	<b>3,144,940</b>	<b>977</b>	<b>4,057,946</b>	<b>944</b>	<b>4,023,790</b>	<b>18.4</b>	<b>20.7</b>	<b>19.1</b>
<b>Grand Total</b>	<b>5,712</b>	<b>17,048,436</b>	<b>5,908</b>	<b>19,611,178</b>	<b>6,343</b>	<b>21,109,272</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The tonnage owned in the United Kingdom represented 38.6 per cent. of the total in 1936-37, and the Australian tonnage 34.5 per cent. The foreign tonnage is owned for the most part in Japan, the Netherlands, Norway, or the United States. The foreign tonnage in 1936-37 was 19.1 per cent. of the total, as compared with 18.4 per cent. in 1928-29 and 20.7 in 1935-36.

During 1936-37 entries and clearances of Australian tonnage in inter-state trade amounted to 6,677,297 tons, or 91.7 per cent. and voyages in oversea trade to 601,710 tons or 8.3 per cent. Tonnage to and from New Zealand was 353,185. Of the other British tonnage, including ships owned in the United Kingdom, 3,549,429 tons were entered from and cleared for inter-state ports and 2,796,652 tons plied between Australia and Great Britain. The tonnage belonging to other nations was employed chiefly in the foreign trade.

During the year 1936-37 the interstate cargo discharged at ports in New South Wales amounted to 3,088,306 tons, and the oversea cargo to 2,130,009 tons, and the shipments to interstate ports represented 3,406,785 tons, and to oversea countries 1,859,461 tons. The interstate trade is carried for the

most part in Australian ships, and the nationality of the vessels in which oversea trade is carried is shown below:—

Nationality of Shipping.	1934-35.		1935-36.		1936-37.	
	Discharged.	Shipped.	Discharged.	Shipped.	Discharged.	Shipped.
<b>Oversea Cargoes.</b>	tons.	tons.	tons.	tons.	tons.	tons.
Australia ... ..	69,774	167,962	79,388	139,213	97,342	160,891
New Zealand ... ..	48,653	175,967	40,205	223,814	32,407	252,764
United Kingdom ... ..	891,375	891,621	990,150	931,290	1,188,089	917,286
Other British ... ..	135,034	52,768	172,657	53,468	167,044	42,546
<b>Total British</b> ... ..	<b>1,144,836</b>	<b>1,288,308</b>	<b>1,291,400</b>	<b>1,347,785</b>	<b>1,484,882</b>	<b>1,373,487</b>
Denmark ... ..	33,795	11,509	29,195	19,154	21,826	35,753
France ... ..	12,660	110,208	15,167	100,933	3,365	103,830
Germany ... ..	41,812	28,408	47,149	24,466	48,749	34,325
Italy ... ..	11,514	7,562	4,374	1,813	5,368	8,852
Japan ... ..	116,856	155,618	134,904	88,865	86,690	65,781
Netherlands ... ..	44,407	52,683	41,158	58,052	68,769	69,317
Norway ... ..	213,635	76,924	290,848	82,739	281,055	82,596
Sweden ... ..	73,400	5,783	59,675	22,014	49,350	15,520
United States of America	70,477	16,895	69,269	46,089	58,637	55,492
Other Foreign ... ..	8,010	64,207	879	43,025	21,318	14,508
<b>Total, Foreign</b> ... ..	<b>926,566</b>	<b>529,507</b>	<b>692,518</b>	<b>487,150</b>	<b>645,127</b>	<b>485,974</b>
<b>Total, Oversea</b> ... ..	<b>1,771,402</b>	<b>1,817,905</b>	<b>1,983,918</b>	<b>1,834,935</b>	<b>2,130,009</b>	<b>1,859,461</b>

Note.—Cargo recorded by measurement is converted to tons on basis of 40 cubic feet = 1 ton.

In 1936-37 British vessels carried 69.7 per cent. of the oversea cargo discharged at ports in New South Wales and 73.9 per cent. of the cargo shipped abroad.

The interstate and oversea trade of New South Wales is confined practically to three centres, viz., Sydney, Newcastle, and Port Kembla, and the distribution amongst the ports of the inward trade at intervals since 1901 is shown in the following table. On each voyage a vessel is counted as an entry only at the first port of call in New South Wales and intra-state trade is excluded, therefore the figures do not indicate the total tonnage entered at each port.

Year ended 30th June.	Port Jackson (Sydney).		Port Hunter (Newcastle).		Port Kembla.		Other Ports.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
1901*	1,864	2,953,511	702	1,036,178	89†	108,520†	85	34,985
1911*	2,181	5,240,351	701	1,857,132	64	102,866	181	115,786
1921	1,869	4,776,182	1,082	2,265,040	42	85,514	26	6,505
1926	1,988	6,304,313	826	1,064,101	83	243,918	48	21,870
1929	2,071	6,768,664	620	1,355,411	144	366,401	30	25,937
1930	2,044	6,958,916	371	836,229	183	445,473	25	17,944
1931	1,800	6,430,904	601	1,262,149	114	232,228	32	12,883
1932	1,719	6,334,450	546	1,222,757	129	204,122	26	17,620
1933	1,822	6,096,920	661	1,503,653	153	207,014	12	13,063
1934	1,796	6,869,387	644	1,463,660	143	279,074	26	12,572
1935	1,899	7,285,123	873	1,978,776	182	354,407	24	24,832
1936	1,983	7,636,852	770	1,775,939	183	387,592	29	26,382
1937	2,040	8,107,367	388	1,941,852	225	484,728	25	35,702

\* Year ended 31st December.

† Wollongong.

Many vessels, including steamers engaged regularly in the trade of New South Wales, discharge cargo at Sydney, then proceed to Newcastle for coal. Such vessels are counted as entries at Sydney only, therefore the inward shipping of Newcastle is greatly in excess of the tonnage stated in the table. The trade of Port Kembla has increased as a result of the establishment of important industries in the locality. The decline in the inward trade of other ports between 1911 and 1921 was due mainly to the omission of Twofold Bay as a port of call for interstate vessels.

The trade of the State is reflected in the cargoes shipped and discharged in various ports, the principal of which are Sydney, Newcastle and Port Kembla. Particulars of the cargoes shipped and discharged at these ports each year since 1926-27 are given in the following table. In recording cargoes certain commodities are assessed on their dead weight in tons, e.g., coal, ores, wool, wheat and other grains, while others such as butter, hides, skins and drapery are recorded in tons measurement, 40 cubic feet being taken as the equivalent of one ton. The greater part of the overseas trade is handled by the port of Sydney and includes the principal products of the State with the exception of those of the coal mining and steel industries which are centred principally about Newcastle and Port Kembla. Dead-weight cargoes are almost exclusively shipped and discharged at the latter ports, while a large proportion of the cargoes shipped and discharged at Sydney is recorded in "tons measurement." Accordingly the data contained in the statement may be taken to indicate fluctuations in the annual trade of individual ports rather than to serve as a comparison of the trade of one port with that of another.

Year ended 30th June	Sydney.				Newcastle.		Port Kembla.	
	Interstate.		Oversea.		Interstate.	Oversea.	Interstate.	Oversea.
	Tons Weight.	Tons Measure.	Tons Weight.	Tons Measure.	Tons Weight.	Tons Weight.	Tons Weight.	Tons Weight.
Cargoes Discharged.								
1927	542,939	430,028	706,562	1,343,133	782,089	119,482	11,854	26,958
1928	459,912	509,977	794,479	1,317,298	720,113	133,776	22,146	30,280
1929	345,850	616,929	791,750	1,315,064	711,637*	123,598	203,455	54,405
1930	361,658	516,797	865,551	1,128,822	427,233	131,458	204,199	49,435
1931	342,287	348,104	571,001	536,894	416,037*	67,821*	86,903*	25,145
1932	376,128	327,441	545,094	457,827	345,321	42,484*	52,851*	15,214
1933	405,844	364,098	650,369	567,158	624,015	79,708	141,162*	30,165
1934	405,829	459,360	657,081	708,417	771,423*	89,047*	230,104	30,528
1935	443,397	507,262	726,224	883,538	1,284,051*	134,165*	318,124*	27,375
1936	478,974	598,895	840,659	972,307	1,266,415*	128,458*	319,736	42,491
1937	515,416	612,456	882,932	1,028,270	1,494,937*	159,532*	465,497	59,275
Cargoes Shipped.								
1927	386,255	395,387	820,543	243,173	2,705,130	763,892*	136,361	84,281
1928	210,371	453,888	551,589	267,818	2,477,640	511,933	100,863	49,265
1929	138,737	530,490	981,003	284,842	1,647,563	251,581*	134,741*	73,605
1930	246,284	481,573	445,768	255,977	650,209*	57,150*	352,259	105,085
1931	105,922	366,261	1,298,476	240,623	1,428,633*	337,450*	95,584	12,900
1932	101,845	392,749	1,310,937	239,510	1,347,457	314,310	99,335	39,672
1933	132,382	416,121	1,384,501	265,312	1,587,106	240,314	116,925	57,324
1934	132,158	487,593	798,334	261,147	1,672,330*	242,038*	136,961	70,966
1935	181,708	528,842	1,089,028	309,449	1,845,664*	311,045*	169,086	89,758
1936	180,649	594,713	1,165,737	284,031	1,990,887*	285,981*	171,879	83,523
1937	200,887	654,531	1,032,234	314,207	2,301,941*	347,972*	234,167	93,779

\* Includes a small number of tons measurement.

Interstate cargoes discharged and shipped in Sydney Harbour reached a low ebb in 1930-31, but have increased in volume since, and in 1936-37 amounted to 1,913,234 tons, or 281,228 tons more than in 1928-29. There was a decline of about 50 per cent. in the inward overseas cargoes in 1930-31 and the aggregate remained at a low level during the following year. There was an increase in each of the following years. Overseas exports of wheat were comparatively small in 1929-30, then followed three years of

increasing activity in the outward trade until 1933-34 when shipments of wheat dwindled again. While the position improved in each of the following years, the aggregate in 1936-37 was still below that of 1932-33.

The oversea trade of Newcastle, both inward and outward, has diminished greatly due to a decline in coal exports. The interstate trade, however, has shown marked increases in recent years, notably in 1936-37, in consequence of the importation from South Australia of iron ore for treatment in the iron and steel works. The interstate trade of Port Kembla increased after the establishment of the iron and steel works in 1928. And there was a temporary diversion of coal trade to this port while the northern mines were closed in 1929 and 1930.

#### HARBOURS AND ANCHORAGES.

Along the coast of New South Wales there are numerous ports, estuaries, and roadsteads, which provide shelter to shipping and afford facilities for trade.

There are five natural harbours where vessels of deep draught may enter, viz., Port Stephens, Broken Bay, Port Jackson (Sydney Harbour), Jervis Bay and Twofold Bay. Port Jackson ranks first by reason of extent, natural facilities, and volume of trade. Port Stephens, 21 nautical miles north of Newcastle, and Broken Bay at the mouth of the Hawkesbury River, have not been developed owing to proximity with Newcastle and Sydney Harbour respectively. Jervis Bay is 82 miles south of Sydney; part of the bay has been ceded to the Commonwealth Government as a port for Canberra, the Federal Capital. Twofold Bay is 208 miles south of Sydney. Newcastle is a bar harbour at the mouth of the Hunter River, where extensive accommodation has been provided for oversea shipping. Artificial harbours have been constructed at Coff's Harbour, Wollongong, Port Kembla, Shellharbour, Kiama, and Ulladulla. With the exception of Port Kembla, they are useful only for small vessels.

There are a number of estuarine harbours, but the entrances are usually blocked to some extent by sandbars, formed by the combined action of ocean currents, waves and wind. There are also numerous roadsteads or anchorages which afford shelter to vessels of moderate draught during southerly or south-easterly weather. Breakwaters and training-walls have been constructed to control the sand movement at the majority of the bar harbours, so that the navigating channels may be maintained with little difficulty.

The shipping trade of the ports other than Sydney, Newcastle, and Port Kembla is relatively small.

#### *Sydney Harbour.*

Port Jackson (Sydney Harbour) is the principal port of New South Wales. It has a safe entrance and affords effective protection to shipping under all weather conditions. At the Heads the depth of water is not less than 80 feet at low water, ordinary spring tide. Between the entrance and the harbour proper, a distance of four miles, there are two separate channels, each with a depth of 40 feet at low tide and a width of 700 feet. The total area of the harbour is 14,284 acres, or about 22 square miles, of which approximately half carries a depth of 30 feet or more at low water ordinary spring tide. The average range of tide is 4 feet 6 inches. The foreshores, being irregular, extend over 188 miles, and afford facilities for extensive wharfage.

The control of the port was vested in the Sydney Harbour Trust from 11th February, 1901, to 31st January, 1936. The Trust consisted of three Commissioners appointed for a term of seven years, with control over the

port and shipping, harbour lights, buoys and wharves, and authority to undertake works for the preservation and improvement of the port, to appropriate wharves, stores, etc., to special uses, and to levy rates and charges in respect of vessels and goods and for the use of property. As previously stated, the powers and functions of the Trust were vested in the Maritime Services Board of New South Wales as from 1st February, 1986.

The wharves are situated in close proximity to the business centre of the city, about 4 or 5 miles from the Heads. Excluding private lighter and ferry berths, there are 74,174 feet of wharfage in Sydney Harbour. The principal wharves are leased to the various shipping companies whose vessels engage regularly in the trade of the port, and other wharves are reserved for vessels which visit the port occasionally. Details relating to the number and length of the berths are shown below:—

Particulars.	Maritime Services Board of New South Wales.		Private Wharfage.		Total.	
	No. of Berths.	Length.	No. of Berths.	Length.	No. of Berths.	Length.
Ship berths—		feet.		feet.		feet.
Oversea ... ..	67	34,772	14	3,819	81	38,591
Interstate ... ..	24	9,355	3	516	27	9,871
Intrastate ... ..	39	11,223	5	772	44	11,995
Cross wharves adjoining ships' berths	39	4,693	...	...	39	4,693
Harbour trade berths ... ..	19	4,633	31	4,391	50	9,024
Ferry berths ... ..	25	3,427	...	...	25	3,427
Total ... ..	213	68,103	53	9,498	266	77,601

On a spit of land, known as Glebe Island, lying between Rozelle Bay and White Bay, works have been constructed to facilitate the shipment of wheat. Storage sheds have been erected for bagged wheat and plant is available for mechanical handling. For bulk wheat there are silos with a capacity of 7,500,000 bushels, and grain may be delivered in bulk into the holds of vessels at the rate of 1,400 tons per hour.

Special facilities are available along the waterside for other important classes of trade, such as wool stores, fitted with appliances to expedite the handling of the staple product, and storage for hazardous goods. By private enterprise, a plant has been installed at Ball's Head, where bunkers may be replenished rapidly with coal or oil.

The wharves are situated on the southern shore of the port, and the northern is used mainly for residential sites. The ferry steamers on which traffic is carried across the harbour are certificated as to seaworthiness and licensed by the Maritime Services Board. During 1936-37 certificates were issued to 36 steamers in Port Jackson, licensed to carry 32,294 passengers.

An arch bridge spanning the harbour from Dawes' Point to Milson's Point was opened on 19th March, 1932. It provides for pedestrian, vehicular, railway and tramway traffic. A description of the bridge is published in the chapter of this volume relating to Roads and Bridges.

An account of the dock accommodation provided in Sydney Harbour is shown on a later page in this chapter.

The number and tonnage of vessels which entered Sydney Harbour during the last nine years, as recorded by the Maritime Services Board, are shown below. The figures differ from those in the table on page 881 as they include vessels engaged in the coastal trade of the State, also vessels which do not report to the Customs authorities on return from a journey to Newcastle for bunker coal:—

Year ended 30th June.	Coastal (State).		Oversea and Interstate.		Total Shipping.	
	Number.	Net Tonnage.	Number.	Net Tonnage.	Number.	Net Tonnage.
1929	4,564	1,352,945	2,498	7,707,208	7,062	9,060,153
1930	3,743	1,183,437	2,449	7,757,098	6,192	8,940,535
1931	3,798	1,260,344	2,184	7,207,938	5,982	8,468,282
1932	3,716	1,218,489	2,133	7,009,467	5,849	8,227,956
1933	3,978	1,285,050	2,337	8,075,066	6,315	9,360,116
1934	4,165	1,333,284	2,333	8,099,493	6,498	9,432,777
1935	4,327	1,427,486	2,528	8,629,066	6,855	10,056,552
1936	4,398	1,502,746	2,587	8,977,028	6,985	10,479,774
1937	4,626	1,594,708	2,669	9,398,687	7,295	10,993,395

The aggregate tonnage of vessels which entered the port of Sydney in 1926-27 was 9,546,973 and declined continuously until 1931-32 when the figures were 8,227,956. It has increased progressively since, and in 1936-37 reached 10,993,395 tons, which exceeded the record of 1935-36 by 513,621 tons. These increases reflect the upward movement in the trade of the State.

Very few sailing vessels are engaged in the trade of New South Wales. Only 4 with a net tonnage of 238 tons, entered Sydney Harbour in 1936-37, as compared with 242 vessels and a tonnage of 124,328 in 1920-21. On the other hand the number of motor ships is increasing. One thousand and ten, with an aggregate tonnage of 2,960,311 tons, entered the port during 1936-37, as compared with 150 with a tonnage of 484,150 in 1926-27. Steamers entered in 1936-37 numbered 6,281, with an aggregate tonnage of 8,032,846 tons. Of these 424 were oil burners, with a tonnage of 2,706,832 tons.

The following statement shows the arrivals in the principal ports of Australasia and Great Britain. The figures include coastwise trade and tonnage which arrived at the respective ports, although not recorded by the Customs Department.

Port.	Arrivals incl. Coastwise— Net Tonnage.	Port.	Arrivals incl. Coastwise— Net Tonnage.
<i>Australia (1936-37)—</i>		<i>England (1935)—</i>	
Sydney ... ..	10,993,395	London ... ..	29,673,932
Melbourne ... ..	8,173,042	Liverpool (including	
Port Adelaide ... ..	4,930,752	Birkenhead) ... ..	16,640,562
Newcastle ... ..	4,875,732	Southampton ... ..	12,508,769
Brisbane ... ..	4,469,773	Newcastle and Shields	8,596,806
Fremantle ... ..	3,512,202	Cardiff ... ..	6,568,276
Townsville ... ..	1,408,390	Hull ... ..	6,132,946
Hobart ... ..	1,139,593	Plymouth ... ..	5,799,532
Albany ... ..	473,014		
Port Kembla ... ..	1,183,456	<i>Scotland (1935)—</i>	
<i>New Zealand (1936)—</i>		Glasgow ... ..	5,703,015
Wellington ... ..	3,907,073	Greenock ... ..	3,038,134
Auckland ... ..	3,054,979	Leith ... ..	2,076,777
Lyttelton ... ..	2,103,627		
Otago ... ..	1,180,943	<i>North. Ireland (1935)—</i>	
		Belfast ... ..	7,161,230

Up to 30th June, 1928, the revenues collected by the Sydney Harbour Trust (now the Maritime Services Board of New South Wales) were paid into the Consolidated Revenue Fund of the State. This arrangement was altered as from 1st July, 1928, when the accounts of the Harbour Trust were separated from the Consolidated Revenue Account, and receipts paid into a special fund. The Board is required to contribute a proportionate share of the sinking fund established under the financial agreement between the Commonwealth and the States. The net profits are payable into a reserve fund to meet losses and for the reduction of rates and charges.

The revenue and expenditure by the port authority at Sydney during each of the last nine years are shown in the following statement, also the capital debt at the end of the year.

Year ended 30th June.	Capital Debt.	Income.	Expenditure.				Surplus.
			Administration and Maintenance Expenses.	Interest and Sinking Fund.	Exchange, etc.	Total Ex- penditure.	
	£	£	£	£	£	£	£
1929	11,488,441	1,103,598	369,037	614,067	...	983,104	120,494
1930	11,673,981	1,017,934	381,421	629,806	...	1,011,227	6,707
1931	11,622,200	840,077	269,831	635,571	25,805	931,207	(-)91,130
1932	11,611,905	832,186	244,581	595,698	149,281	989,560	(-)137,874
1933	11,596,315	880,012	213,985	569,201	107,917	891,103	(-)11,091
1934	11,585,907	855,959	225,782	535,321	91,270	852,373	3,586
1935	11,518,020	968,147	272,030	511,280	70,655	853,965	114,182
1936	11,450,692	1,040,611	279,446	497,447	72,334	849,227	191,384
1937	11,452,929	1,093,691	293,783	483,209	61,272	838,264	255,427

(-) Denotes deficiency.

The total income during 1936-37 was £1,093,691. After the deduction of administration and maintenance expenses £293,783, interest and sinking fund charges £483,209, and exchange and loan management expenses £61,272, there was a surplus on the year's transaction of £255,427. The ratio of administration and maintenance charges to income was 26 per cent.

The principal sources of revenue were wharfage and transhipment rates, which amounted to £745,978, and rents from properties £273,400. The corresponding amounts for 1935-36 were £701,745 and £264,870.

#### *Newcastle Harbour.*

Newcastle Harbour (Port Hunter) is the second port of New South Wales and the fourth port of Australia in regard to the volume of its shipping trade. The harbour lies in the course of the Hunter River, and its limits are not defined, but an area of about 990 acres is enclosed by about 8 miles of coastline, extending on the western side as far as Port Waratah, omitting Throsby Creek, and on the eastern side to a point due east of the southern end of Moscheto Island. The area used by shipping is about 570 acres, excluding the entrance to the harbour and the inner basin, which together cover an area of 162 acres. The width at the entrance between breakwaters is 1,500 feet, and the navigable channel is 600 feet wide with a minimum depth of 25 feet 6 inches at low water ordinary spring tide, but vessels which draw 29 feet can enter at high water spring tides under suitable weather conditions. Works are in progress with the object of ultimately increasing the depth at the entrance to 32 feet.

The harbour is landlocked sufficiently to render it safe for vessels in all kinds of weather, and breakwaters have been erected to improve the entrance and to prevent the ingress of sand from the ocean beaches. Newcastle is primarily a coal-loading port, and the proximity of the coalfields has led to the establishment of important industries, including iron and steel works, in the district, so that trade in other commodities is likely to develop steadily. Progress has been made in the shipment of wool, wheat and frozen meat, and a wharf is available for timber. A terminal elevator for the export of bulk wheat has been erected, and wharfage has been reconstructed for wheat loading purposes.

Wharfage accommodation to the extent of 22,900 feet is provided; 9,198 feet are used for the shipment of coal, 6,722 feet for general cargo, 2,643 feet for Government purposes, and 3,397 feet are leased. There are 108 mooring dolphins and jetties for vessels awaiting cargo. A floating dock of 15,000 tons capacity is available at the Government Dockyard, Walsh Island. The general cargo wharves are connected with the main railway system, and the railway extends along the coal wharves.

The shipping entered during 1936-37 included coastal, 2,569 vessels, 1,164,544 tons; interstate, 1,328 vessels, 2,029,483 tons; and overseas, 462 vessels, 1,681,705 tons; total, 4,359 vessels, 4,875,732 tons. In 1935-36 the total was 4,422,581 tons.

#### RIVER TRAFFIC.

New South Wales has few inland waterways, and although there is some river traffic its extent is not recorded. The coastal rivers especially in the northern districts are navigable for some distance by sea-going vessels and trade is carried further inland by means of small steamers and launches.

The use of the inland rivers for navigation depends mainly on seasonal conditions. Traffic on the Darling is intermittent. At certain times, in seasons when the rainfall is sufficient to maintain a fair volume of water, barges carry wool and other products a considerable distance.

A scheme is in progress for the construction of a storage dam, weirs and locks on the Murray and Murrumbidgee Rivers. The works are being constructed under an agreement between the Governments of the Commonwealth and of the States of New South Wales, Victoria, and South Australia, which provides that, except in times of unusual drought, sufficient water must be maintained for navigation by vessels drawing 5 feet of water.

At 30th June, 1937, twelve weirs and locks on the Murray and Lake Victoria storage had been completed and were in operation, the Hume Reservoir was complete to its present capacity of 1½ million acre-feet, and the Murray River was permanently navigable by vessels drawing 5 feet for a distance of about 600 miles, viz., from its mouth to some forty miles above Mildura. The following works in connection with the Murray River are in progress: a weir and lock at Euston, a weir at Yarrawonga and barrages respectively across the Goolwa, Mundoo and Boundary Creek channels near the river mouth. Also weirs are being constructed on the Murrumbidgee at Redbank.

The expenditure for the construction of reservoirs, locks and other works at 30th June, 1937, amounted to £10,853,817.

#### HARBOUR FERRY SERVICES.

In the ports of Sydney and Newcastle, ferry services have been established by private companies to transport passengers, etc., across the Harbours, the conditions under which the services are conducted being regulated by license. At 30th June, 1937, 45 boats licensed to carry 34,343 passengers were in service, and 872 persons were employed.

Approximately 25,566,963 passengers were carried during the year 1936-37; 4 passengers and 65 employees were injured in accidents and 4 employees were killed; the total revenue amounted to £389,420, and the expenditure to £352,447. Some of the services in Sydney Harbour were discontinued after the opening of the Harbour Bridge in March, 1932.

These ferries are distinct from those to which reference is made in the chapter entitled Local Government, which are maintained by the central Government or by municipalities or shires for the free transport of traffic across rivers where bridges have not been erected.

#### RATES OF FREIGHT.

Freight charges represent an important factor in the cost of marketing in oversea countries the products of the industries of New South Wales. Generally the rates charged by British lines of steamships are determined by organisations of shipowners.

An association of shipowners and shippers, known as the Australian Oversea Transport Association, was formed in June, 1929, with the object of organising on an economical basis the shipping services to and from Australia. A series of agreements has been arranged in regard to rates of freight and other conditions affecting the shipment of cargoes by vessels engaged regularly in the trade between Australia and Europe.

During the war period, rates of freight rose to an extraordinary level. The maximum for most commodities was reached in 1919, then the over-supply of shipping led to a general decline and the movement became steadily downward. The decrease is especially noticeable in regard to classes of cargo carried by tramp steamers, *e.g.*, wheat, for which freight was charged at £7 10s. per ton in 1920, and in the following year space was obtained at the rate of £2 6s. 8d. per ton. During the nine years ended June, 1937, rates for most commodities were fairly steady.

As a rule, freight on general cargoes is paid in sterling at the port of destination. If freight was prepaid in Australia in 1930-31 and later years, shippers were required to add to the rates quoted an additional charge on account of exchange. On refrigerated cargoes, exchange was charged at concession rates, *viz.*, 3 per cent. in 1930-31, 23 per cent. in July to December, 1931, and 18 per cent. since 1st January, 1932. The rates of exchange quoted by the Australian banks are shown in the Chapter "Private Finance" of this volume.

The following statement shows the range of rates for the carriage of various commodities by steamer from Sydney to London in 1911 and later years:—

Article.	1911.	1920-21.	1934-35.	1935-36.	1936-37.
Butter ... box 56 lb.	2s. to 2s. 6d.	6s.	4s.	4s.	4s.
Copra ... ton	40s.	225s. to 120s.	61s. 3d.	61s. 3d.	61s. 3d.
Hides ... lb.	40s. to 52s. 6d. †	1½d. to 1d.	½d.	½d.	½d.
Leather ... ton	60s.	270s. to 244s.	137s. 9d.	137s. 9d.	137s. 9d.
Mutton—Frozen lb.	½d. to 1½d.	1½d.	1d.*	1d.*	1d.*
Tallow ... ton	40s. to 42s. 6d.	180s. to 170s.	70s. 9d.	70s. 9d.	70s. 9d.
Wheat ... ton	17s. 6d. to 30s.	120s. to 46s. 8d.	21s. 3d. to 23s. 9d.	23s. 9d. to 27s. 6d.	25s. to 45s.
Wool—Greasy ... lb.	½d. to 1½d.	1½d. †	1½d. †	1½d. †	1½d. †
Measured Goods—40 cub. ft.	25s. to 45s.	120s. to 105s.	63s.	63s.	63s.
Timber 100 sup. ft.	6s.	35s. to 22s.	10s. to 11s.	10s. to 11s.	10s. to 11s.

† Per ton. ‡ Plus 5% primage, less 10% rebate, and an additional rebate of 1s. 9d. per bale from 1933-34 to 1936-37. \* Less 7½%. || Less 11%.

Wool is carried direct to Continental ports in Europe at the same rates as to London, but the rates are higher if it is taken to London and transhipped there to the Continent. The rate for wool from Sydney to Japan in 1935-36 and 1936-37 was ½d. per lb.

## PORT CHARGES.

The port charges payable in respect of shipping and ships' cargoes in New South Wales are imposed by the Commonwealth Government in terms of the Lighthouses Act and the Federal Navigation Act, and by the State authorities under the Navigation Act of New South Wales, the Harbour and Tonnage Rates Act, and the Sydney Harbour Trust Acts. Since 1st February, 1936, the State enactments have been administered by the Maritime Services Board. The various charges are shown in detail in the Statistical Register of New South Wales, published annually, and only a brief reference to the rates collected by each authority is made in this volume.

The gross collections by the State during recent years are shown below in comparison with those during the years 1910-11 and 1920-21:—

Charges.	Year ended 30th June.				
	1911.	1921.	1935.	1936.	1937.
	£	£	£	£	£
Pilotage ... ..	43,856	74,733	68,309	69,177	68,707
Harbour Removal Fees ... ..	7,306	10,647	4,116	4,150	3,599
Harbour and Light Rates ... ..	41,331	49,551	47,241	49,870	50,103
*Navigation Department Fees, etc.	9,256	10,839	1,155	3,742	6,167
Harbour and Tonnage Rates (Out-ports) ... ..	6,792	72,865	171,137	180,767	204,700
*Sydney Harbour Trust—					
Wharfage and Tonnage Rates ...	228,379	475,230	671,441	737,803	777,245
Rents of Wharves and Jetties ...	77,930	188,473	149,609	155,315	159,161
Rents of other premises ... ..	46,178	71,666	76,759	109,555	114,240
Miscellaneous ... ..	22,273	61,629	70,338	37,874	43,045
Total ... ..	483,301	1,015,633	1,260,105	1,348,253	1,426,967

\* Maritime Services Board from 1st February, 1936.

The light dues collected in Australia by the Commonwealth Government during the year ended 30th June, 1937, amounted to £202,090, and receipts under the Federal Navigation Act to £13,276.

*Charges levied on Ships.*

The principal charges imposed under Federal legislation are light dues and fees for the survey of ships, the adjustment of compasses, etc.

The Commonwealth light dues must be paid in respect of every ship entering a port in Australia. The rate, payable quarterly, is 9d. per ton (net), and payment at one port covers all Australian ports which the vessel may enter during the ensuing period of three months. Vessels calling at only one port in Australia *en route* to an overseas destination are charged at the rate of 5d. per ton (net). If a vessel is laid up for a period of at least one month, a proportionate remission of the light dues may be made.

The Federal Navigation Act prescribes that sea-going vessels must be surveyed at least once in every twelve months, and a vessel may not go to sea without a certificate of survey or equipment issued by the Federal Department of Navigation, or other approved certificate. The fees for survey and for compass adjustment are collected by the Federal Department

of Navigation and those in respect of compass adjustments are paid to licensed adjusters. The prescribed survey fees for a twelve-months' certificate in respect of steamers, motor ships, and of sailing ships (50 tons and over) with auxiliary engines, range from £4 where the gross registered tonnage does not exceed 100 tons to £13 10s. if the gross tonnage is between 2,100 and 2,400 tons; and a charge is made for each additional 300 tons at the rate of 30s. for passenger ships and £1 for cargo ships. For ships under 1,800 tons propelled by sails only, the fee ranges from £3 to £6 with 15s. for each additional 300 tons. The survey fees for dry docking certificates range from £1 to £4, and double rates are charged for vessels without certificates of survey. The fees for the adjustment of a ship's compasses range from £2 2s. to £7 7s.

The certification of ships trading exclusively within the limits of the State of New South Wales is a function of the Maritime Services Board of New South Wales. The fees payable for surveys in respect of a twelve months' certificate range from £2 to £8 where the tonnage does not exceed 600 tons, with £2 for each additional 300 tons up to a maximum of £20.

Pilotage rates are charged by the Maritime Services Board of New South Wales in respect of every ship entering or clearing a port in the State where there is a pilotage establishment. Vessels engaged in the whaling trade and vessels in the charge of a master possessing a pilotage certificate are exempt unless a pilot is actually employed. The rate is 1½d. per ton (net), on arrival and on departure for ships (a) in ballast, (b) arriving solely for refitting or docking, (c) resorting to port solely on pleasure or for orders, repairs, provisions or coal, or through stress of weather or otherwise in distress. The rate for other ships is 2½d. per ton on arrival and on departure. The maximum charge is £25 and the minimum is £3 at Sydney or Newcastle, and £1 10s. at other ports.

The harbour and light rate imposed by the State Government is payable half-yearly at the rate of 4d. per ton (net).

The exemptions are vessels engaged in the whaling trade, vessels entering port for refitting or docking, for pleasure, orders, repairs, provisions or coal, or in distress, and those in respect of which the rate has been paid at any port in the State during the preceding six months.

Vessels being removed from one place to another in a port where there is a pilot establishment are charged harbour removal dues unless the master possesses a pilotage certificate. The rate for a removal varies from £1 to £4 10s. according to the size of the vessel; half rates are charged after the third removal.

Tonnage rates are payable in respect of vessels of 240 tons and over while berthed at a wharf—the charge is ½d. per ton (gross) for each period of six hours. Vessels under 240 tons are liable for berthing charges, the daily rate in Sydney Harbour being 1s. to 10s., according to passenger capacity, for vessels engaged in picnic, excursion or passenger traffic, and 2s. 6d. to 10s. for other vessels. Berthing charges in other ports are calculated at the rate of 2s. 6d. for each period of six hours. Where wharves are leased to shipping companies in the port of Sydney the tonnage rates and berthing charges in respect of their vessels are not charged as they accrue, but are commuted in the rent.

Moorings may be laid down in Sydney Harbour with the approval of the Maritime Services Board. An annual license fee of £5 is charged for moorings owned and used by shipping companies; and from 2s. 6d. to 10s. for those used in connection with docking premises or for small vessels. In other ports vessels are allowed to occupy Government mooring buoys for a period of two clear days free of charge, thereafter buoyage rates ranging from £1 to £3 per day are imposed. Exemption from buoyage rates may be granted by the officer in charge of a port if a vessel is detained through stress of weather or when an unforeseen circumstance renders it desirable that the vessel should occupy a Government buoy.

Tugs, ferry boats, hulks, and launches plying for hire in Sydney Harbour must obtain a license, for which the charge is £1 per annum. For water boats supplying water to shipping in the port the annual license fee is £5; for lighters, 2s. per ton up to 200 tons and 1s. for each additional ton, the minimum fee being £2; and for watermen 5s. In other ports the annual license fees for ballast lighters and for watermen are £1 and 10s. respectively. The charge for water supplied to a vessel by the Maritime Services Board is 2s. per 1,000 gallons if the water is taken through hoses supplied by the Board; in other cases the rate is 1s. 6d. per 1,000 gallons.

#### *Harbour and Wharfage Rates.*

In addition to the foregoing charges levied on the vessels and payable by their owners, harbour or wharfage rates payable by the owners of the goods are imposed on the cargoes landed or shipped in the ports. Goods transhipped are subject to transshipment rates and not to inward or outward wharfage or harbour rates. Passengers' luggage is exempt. The schedules of rates for Sydney are contained in the Port of Sydney regulations, and for other ports they are proclaimed under the Harbour and Tonnage Rates Act.

In Sydney Harbour, unless it is otherwise specified in the schedule, the inward rate is 4s. per ton assessed by weight or by measurement (40 cubic feet) at the option of the Board. There are a number of special inward rates—some apply only to Australian products arriving from another port in the Commonwealth, *e.g.*, 2s. 6d. per ton of dairy produce, fresh fish, poultry, iron or steel, fencing wire, copper or stone; 2s. 6d. per 630 superficial feet of rough or sawn timber. The inward rate on coal is 1s. per ton, and on liquid fuel 2s. per ton, but only the transshipment rate—6d. per ton—is levied when these commodities are shipped in Sydney for consumption as bunker fuel by the loading vessel. In cases of vessels trading beyond the Commonwealth, coal loaded for bunker use is subject to the transshipment rate only, less 20 per cent. Kerosene in the case is charged at the rate of 2½d. per case; green fruit—Australian 1½d. and other 2d per package; vegetables, 1½d. per case; timber (other than Australian), 3s. 6d. per 630 super feet; copra, 3s. per ton; guano, 1s. 3d. per ton; sugar for refining, 2s. per ton; wool, 9d. per bale. The general rate on transshipments is 6d. per ton or 40 cubic feet, but there are a number of special rates ranging down to ½d. per ton, which is payable on pumpkins and melons.

The general outward rate in operation in Sydney Harbour is 1s. 6d. per ton or 40 cubic feet. The rate in respect of coal is 6d. per ton; wheat and coke 9d. per ton; wool 9d. per bale; ore 4½d. per ton. These rates are subject to a discount of 20 per cent. if the goods shipped are for conveyance beyond the Commonwealth.

In ports other than Sydney there is a schedule of inward rates for coastwise and interstate goods, and a separate schedule for oversea goods. The inward general rate for coastwise and interstate goods arriving at these ports is 2s. per ton or 40 cubic feet, and special rates include coal and firewood 6d. per ton; coke and fertilisers 1s. per ton; ores 4½d. per ton; ore products 9d. per ton; timber 2s. per 630 super feet. The general inward rate imposed on oversea goods is 4s. per ton by weight or by measurement, and the special rates include coal 1s. per ton; undressed timber 3s. 6d. per 630 super feet; ore 9d. per ton.

The outward rate in ports other than Sydney on coastwise, interstate, and oversea goods is 1s. per ton or 40 cubic feet, unless otherwise specified; ore and ore products are rated at 4½d. per ton; timber—sawn or rough—1s. 3d. per 630 super feet; wool—coastwise or interstate—9d. per bale or 4½d. per bag; overseas, 6d. per bale or 3d. per bag; wheat 9d. per ton. These rates are subject to a reduction of 20 per cent. if the goods be shipped to a destination beyond the Commonwealth.

#### *Storage Charges.*

In order to avoid congestion on the wharves, storage and shed charges are imposed on goods placed on a wharf if not removed within a specified period.

Goods left on an unleased wharf after final discharge of the vessel for a longer period than six days are charged at the rates per ton per day of 4d. for the first week, 5d. for the second week, 6d. for the third week, and 7d. thereafter. Goods left on an unleased wharf for more than two days after having been received for shipment are charged at the rate of 1d. per ton per day. Shed charges are at the rate of one-tenth of a penny per square foot of the floor space occupied. These charges apply to the Port of Sydney only and are payable by the owner of the vessel or his agent.

At ports other than Sydney storage charges do not accrue on goods until forty-eight hours after the completion of the vessel's discharge. The general charge per ton per day is 2d. for the first week; 3d. for the second week; 4d. for the third week; and 6d. for the fourth and subsequent weeks. The charge on wool at Newcastle is 1d. per ton per day; timber is charged for the first four days (after the free period) 1d. per ton per day, and thereafter 2d. per ton per day; and by special approval a reduced rate of 3d. per ton per week operates in respect of wheat until 30th June, 1938.

#### SHIPPING REGISTERS.

Shipping in New South Wales is registered in accordance with the Merchant Shipping Act of the Imperial Parliament, under sections which apply to the United Kingdom and to all British dominions. The Act prescribes that all British vessels engaged in trade must be registered, except those under 15 tons burthen employed in the coasting trade of the part of the British Empire in which the owners reside. Ships not legally registered are not entitled to recognition as British ships and are not permitted to proceed to sea. Although the registration of vessels under 15 tons is not compulsory, many small vessels are registered at the request of the owners, as registration facilitates the transaction of business for the purpose of sale or mortgage. The flag for merchant ships registered in Australia is the red ensign usually flown by British merchant vessels, defaced with a white seven-pointed star indicating the six federated States of Australia and the territories of the Commonwealth and the five smaller white stars representing the Southern Cross.

In New South Wales shipping registers are kept at the ports of Sydney and Newcastle. The following statement shows particulars regarding the shipping on the registers, as at 30th June, 1937:—

Tonnage Class.	Steam.		Motor.		Sailing.		Total.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
Under 50 tons ...	188	3,958	275	3,050	185	2,069	648	9,077
50 and under 500...	141	22,260	7	923	62	9,257	210	32,440
500 " " 1,000...	18	13,370	2	1,051	4	3,438	24	17,859
1,000 " " 2,000...	8	12,021	1	1,883	3	3,727	12	17,631
2,000 and over ...	6	15,704	1	2,626	...	...	7	18,330
Total ...	361	67,313	286	9,533	254	18,491	901	95,337

23 vessels, with an aggregate tonnage of 2,365 tons (net), were sold during 1936-37. Of these 22 with a net tonnage of 1,355 tons were sold to British subjects, and the transactions did not necessarily involve removal from the registers.

#### SHIPBUILDING AND REPAIRING.

Accommodation for building, fitting, and repairing ships has been provided by State and private enterprise at Sydney and Newcastle, and at four other ports in New South Wales.

In Sydney Harbour there are four large graving docks, five floating docks, and seven patent slips.

Two graving docks, the Fitzroy and the Sutherland, situated on Cockatoo Island, were under the control of the Government of New South Wales until February, 1913, when they were transferred to the Commonwealth. They were controlled later by the Australian Commonwealth Shipping Board until 1st March, 1933, when the Commonwealth Government leased the undertaking to a private company under agreement for a term of 21 years. The agreement was ratified by the Cockatoo Dockyard Agreement Act, 1933. The annual rent ranges from a minimum of £1,000 to a maximum of £50,000, the rent for the first year being £1,000. Thereafter it is to be calculated as a proportion—rising from 2½ per cent. to 5 per cent.—of the turnover, less 2½ per cent. of the cost of stores and materials used. The Sutherland Dock is 690 feet long, and can accommodate a vessel with a breadth of 84 feet, and a draught of 27 feet. The Fitzroy Dock is 474 feet long and its breadth is 47 feet. It can take vessels drawing 13 feet 6 inches. At Cockatoo Dock there are also two patent slips, where vessels drawing 9 feet and 4 feet respectively may be slipped. The works on Cockatoo Island are equipped with plant for shipbuilding as well as for all classes of repairs.

A private company, Mort's Dock and Engineering Company, Limited, owns two graving docks in Sydney Harbour, four floating docks, two of which are out of commission, and three patent slips. The Woolwich Dock is 850 feet long, and at high tide can take vessels drawing 26 feet; Mort's Dock is 641 feet long, and vessels drawing 19 feet 6 inches may be floated into it. The largest of the slips is 270 feet long; it can take a vessel weighing 1,500 tons gross, drawing 11 feet forward and 16 feet aft. The works of the Mort's Dock and Engineering Company are equipped with plant for shipbuilding, as well as for all classes of repairs.

There is another dock, under private ownership, with a lifting power of 300 tons, and the State Government maintains a slip with a lifting capacity of 50 tons.

At Newcastle there are a floating dock and two patent slips attached to the State Government Dockyards at Walsh Island, and two slips which are privately owned.

The works at Walsh Island were established on a site which was originally a sandspit, and has been built up by dredging from the bed of the Hunter River. In 1913, after the Cockatoo Dockyard had been transferred to the Federal Government, workshops were erected at Walsh Island for the construction and repair of Government dredges and other vessels. Subsequently the establishment was extended, and provision was made for the construction of merchant ships and ferry steamers, and for other classes of engineering and iron work. Early in 1933 it was decided to restrict operations exclusively to docking. The length of the dock is 630 feet and it is 82 feet broad, with a capacity for floating vessels up to 15,000 tons. The cost of constructing the floating dock to 30th June, 1937 amounted to £502,330, of which £135,000 was contributed by the Commonwealth. Each of the patent slips is 292 feet in length, one only being in use with a lifting capacity of 300 tons. During the year ended 30th June, 1937, 22 vessels were slipped at Walsh Island and 26 were docked. The gross tonnage of these vessels was 52,155.

Graving docks under the control of the State Government are maintained at the ports of the Tweed, Richmond and Clarence Rivers to meet the requirements of vessels engaged in the coastal trade. The largest on the Richmond River, is 214 feet 6 inches long and 45 feet wide; it can accommodate a vessel with a draught of 9 feet 6 inches. Nineteen vessels with a gross tonnage of 2,318 tons were docked at these ports during the year 1936-37.

#### SEAMEN.

Matters relating to the employment of seamen are subject to control by the Commonwealth Government in terms of the Federal Navigation Act. Provision is made for the regulation of the methods of engagement and discharge, the form of agreement, rating, the ship's complement, discipline, hygiene, and accommodation. Mercantile marine offices were established in March, 1922, to undertake functions performed hitherto by State shipping offices at Sydney, Newcastle and Port Kembla where engagements and discharges are registered.

The following statement shows the number of transactions at the Newcastle and Sydney offices during the last eight years:—

Year ended 30th June.	Engagements Registered.			Discharges Registered.			Licenses to Ship.		
	Sydney.	Newcastle.	Total.	Sydney.	Newcastle.	Total.	Sydney.	Newcastle.	Total.
1930	17,740	1,573	19,313	17,429	1,337	18,766	501	35	536
1931	13,916	1,836	15,752	13,271	2,134	15,405	315	40	355
1932	15,600	1,598	17,198	15,138	1,408	16,546	259	47	306
1933	15,479	1,933	17,412	15,762	1,927	17,689	235	37	272
1934	13,760	2,098	15,858	13,409	2,022	15,431	191	27	218
1935	16,404	2,669	19,073	16,562	2,582	19,144	281	50	331
1936	18,708	2,812	21,520	18,789	2,735	21,524	728	90	818
1937	18,939	3,365	22,304	19,184	3,298	22,482	352	54	406

The rates of wages, hours of labour, and conditions under which crews work on vessels engaged in the interstate and coastal trade of Australia are fixed by awards and agreements under the Commonwealth Conciliation and

**Arbitration Act.** In accordance with the practice of the Federal industrial tribunals the rates are subject to periodical adjustment on account of changes in retail prices.

The rates ruling at 1st July, 1937, were as follows, victualling and accommodation being provided in addition to wages:—

Occupation.				Rates of Wages per Month.						
				£	s.	d.	£	s.	d.	
Officers—Chief ...	...	...	...	21	14	0	to	35	8	6
	Second ...	...	...	19	14	0	„	31	8	6
	Third ...	...	...	20	14	0	„	26	18	6
	Junior ...	...	...	£19 14s. 0d.						
Engineers—Chief ...	...	...	...	23	4	0	to	65	8	6
	Second ...	...	...	21	14	0	„	40	16	6
	Third ...	...	...	19	14	0	„	32	8	6
	Fourth ...	...	...	20	4	0	„	27	15	6
	Fifth ...	...	...	£19 14s. 0d.						
Firemen ...	...	...	...	£17 17s. 6d.						
Trimmers ...	...	...	...	£15 17s. 6d.						
Able Seamen—Steamers	...	...	...	£15 17s. 6d.						
Ordinary Seamen	...	...	...	9	0	0	to	10	0	0
Cooks ...	...	...	...	13	5	0	„	22	15	0
Stewards ...	...	...	...	13	15	0	„	18	15	0
Stewardesses ...	...	...	...	8	2	6	„	9	5	0

The monthly rates payable to officers and engineers vary according to the size of the vessels on which they are engaged.

Except where provided specifically in the awards and agreements, the ordinary hours of work for seamen are eight per day, and overtime must be paid for time worked in excess of eight hours. Manning conditions are regulated by committees representing the shipowners and the unions.

Compensation to seamen is provided by a federal law, the Seamen's Compensation Act, 1911, which applies to ships in the service of the Commonwealth (exclusive of naval and military service), and to ships trading with Australia, or engaged in any occupation in Australian waters, or in trade and commerce with other countries or among the States. The schedules of the Act indicate the amount of compensation payable, in case of death or total or partial incapacity resulting from personal injury by accident to seamen in the course of their employment. Methods of procedure for the recovery of compensation are prescribed by regulations under the Act.

Seamen employed on New South Wales ships, *i.e.*, ships registered in New South Wales, or owned or chartered by the Government or by a person or body corporate whose place of business is in the State, may claim compensation under the Workers' Compensation Act of New South Wales, if they agree not to proceed under the federal law provided such ships are engaged solely in the intra-state trade of New South Wales.

#### SAFETY OF LIFE AT SEA.

The navigation laws contain stringent provisions designed to prevent unseaworthy ships from proceeding to sea, and to ensure that all vessels are manned by competent crews, that life-saving appliances are carried, and that special arrangements are made to safeguard dangerous cargoes. Regulations have been framed for the prevention of collisions, also rules regarding the lights and signals to be used.

On account of the regularity of the coast of New South Wales and the comparative absence of islands, navigation in the seaboard waters is usually safe. Along a coastline less than 700 miles in length there are twenty-five light-houses, and lighted beacons, leading lights, and other guides have been placed for the safety of harbour navigation in the ports of Sydney, Newcastle, Port Kembla and other shipping places. The highway lights on the sea coast, twenty in number, are under the control of the Commonwealth.

Pilotage is a State service under the provisions of the Navigation Act of New South Wales. A pilot must be engaged for every vessel entering or leaving a port of New South Wales unless the master holds a certificate of exemption. Such certificates may be granted to British subjects only, for use in respect of British ships registered in Australia or New Zealand and employed in the trade between ports in Australasia and the South Sea Islands, or engaged in whaling. The pilotage rates are shown on page 890.

Wrecks and shipping casualties which occur to British merchant shipping on or near the coast of New South Wales are investigated by Courts of Marine Inquiry. The majority of wrecks reported are small coasters under 200 tons. The following statement shows the wrecks reported in each year from 1931 to 1937. No wrecks were reported in 1936. The figures relate to vessels with crews who were domiciled in New South Wales:—

Year ended 30th June.	British Vessels.				Tonnage (net).	Crews and Passengers.	Lives Lost.
	Steam.	Motor.	Sailing.	Total.			
1931	2	1	...	3	2,722	258	...
1932	2	...	1	3	1,265	42	...
1933	4	1	...	5	589	9	1
1934	8	...	1	9	1,283	75	17
1935	1	...	...	1	18	43	3
1937	3	1	...	4	1,084	41	8

Lifeboat stations are maintained at Sydney and at Newcastle, and motor lifeboats and life-saving appliances are kept at certain places along the coast. The pilot vessels are fitted for rescue work, and steam tugs are subsidised for assisting vessels in distress.

The Royal Shipwreck Relief and Humane Society of New South Wales affords relief to distressed seamen and their dependants and to the crews and necessitous passengers wrecked in New South Wales waters. It is maintained by public subscription, without subsidy from the State. The value of relief given during 1935-36 and 1936-37 amounted to £772 and £729 respectively.

## AVIATION.

Civil aviation in Australia is subject to the Air Navigation Act, 1920-1936, which authorises the Governor-General of the Commonwealth to make regulations for the purpose of giving effect to the Convention for the Regulation of Aerial Navigation (signed in Paris on 13th October, 1919) and of providing for the control of air navigation (a) in relation to trade and commerce with other countries and among the States, and (b) within any territory of the Commonwealth.

Intra-State flying at present is not subject to the Commonwealth regulations, but consequent on a recent conference between Federal and State representatives, it is proposed to bring such flying within the scope of the Air Navigation regulations by means of State legislation.

The Federal Government has surveyed routes and established landing grounds in various parts of Australia, and has afforded assistance to certain private organisations and aero clubs for the encouragement of civil aviation.

The following are particulars relating to regular air services operating in New South Wales at 30th June, 1937.

(a) Subsidised services: Butler Air Transport Ltd., Cootamundra—Charleville (Queensland), 629 miles, twice weekly each way; Adastra Airways Ltd., Sydney—Bega, 205 miles, twice weekly each way.

(b) Unsubsidised services (carrying mails): Australian National Airways, Ltd., Sydney—Melbourne, 490 miles, twice daily each way, except Sundays; Airlines of Australia Ltd., Sydney—Brisbane, 500 miles, twice daily each way, and once on Sunday; Australian National Airways Ltd., Adelaide—Renmark—Broken Hill—Mildura—Melbourne, 747 miles, three times weekly; Adelaide—Broken Hill—Mildura—Adelaide, 638 miles, round trip weekly; Victorian and Interstate Airways Ltd., Melbourne—Hay, 233 miles, daily each way, except Sundays; Intercity Airways Ltd., Sydney—Broken Hill, 635 miles, twice weekly each direction.

(c) Unsubsidised services (not carrying mails): Adastra Airways Ltd., Sydney—Bega, 205 miles, twice weekly in each direction; Airlines of Australia Ltd., Sydney—Newcastle, 80 miles.

The Federal Government has approved of the establishment of a regular subsidised air service between Sydney and Rabaul (New Guinea), 2,522 miles, once weekly in each direction, and which will probably be inaugurated early in 1938.

Mascot Aerodrome, the airport to serve Sydney, has been improved by making more landing area available and by the construction of additional runways and tarmacs. The work towards the completion of the airport is still in progress, and will include night lighting, radio and meteorological facilities, together with an airport building to house radio, etc., and the administration staff and control officers.

Newcastle is at present served by the airport at District Park. Among the many towns at which landing facilities are available are Bega, Bourke, Broken Hill, Coff's Harbour, Coonamble, Cootamundra, Canberra (F.C.T.), Dubbo, Deniliquin, Goulburn, Hay, Holbrook, Kempsey, Lismore, Nyngan, Narrandera, Narromine, Nowra, Parkes, Tamworth, Tenterfield, Wagga, and Wingham.

In anticipation of increased air transport between capital cities, and for proposed night air mail services, aerodromes are being improved and equipped with night-landing facilities at Evans Head, Coff's Harbour, Kempsey, Goulburn and Holbrook. New aerodromes, are also to be established in the vicinity of Newcastle and in the Taree district.

As additional aids to air navigation the Federal Government has approved of the establishment of meteorological and radio stations at aerodromes in the capital cities and at other selected centres. Such aids will be provided at an early date at Mascot, Kempsey and Canberra, (F.C.T.). Whilst Holbrook will be served with an aeronautical radio station.

Aero clubs in Sydney and Newcastle provide facilities for flying training and practice. The Newcastle club also engages in similar activities at a number of provincial centres. The Federal Government grants assistance to the clubs by providing hangar accommodation, free use of aerodromes, suitable clubhouses which are leased to the clubs and bonus payments in respect of members graduating for and renewing pilots' licences. Clubs also receive grants from the Federal Government towards the cost of upkeep of their aircraft.

The Sydney club, which is known as the Royal Aero Club of New South Wales, commenced active training work in 1926 and about 350 members have qualified for private pilots' licences. Some of these have completed advanced courses of training, gained commercial licences and now own aircraft, and some have qualified as flying instructors. Flying training is also given by Kingsford-Smith Air Service Ltd., and Airflite Ltd.

Particulars relating to aircraft in each of the last five years are shown below. The figures refer to aircraft registered in New South Wales, and owing to interstate flying, do not cover all the aviation which has taken place within its boundaries.

Particulars.	Year ended 30th June.				
	1933.	1934.	1935.	1936.	1937.
Companies or persons owning aircraft (a)	47	40	54	54	44
Aircraft (a)—	53	58	72	81	68
Licensed Pilots (a)—					
Private	110	144	199	217	236
Commercial	61	66	65	71	79
Flights—Number	19,172	19,374	19,585	23,238	25,506
Hours	9,515	9,933	13,534	20,141	24,619
Mileage (approximate)	846,463	887,289	1,220,452	1,935,346	2,650,630
Passengers carried	29,841	14,394	22,746	22,691	24,699
Accidents—Persons killed	1	6	2	8	10
Persons injured	2	2	2	4	2
Goods—Weight carried	lb. 7,835	10,209	28,273	137,103	234,879
Mails—Weight carried	lb. 5,336	7,435	8,946	(b)12,624	(b)22,712

(a) At 30th June.  
destined for overseas.

(b) Exclusive of particulars of mails carried on interstate services but

## POSTS AND TELEGRAPHS.

The postal, telegraph, and telephone services of New South Wales have been controlled by the Commonwealth Government since 1st March, 1901. The services are administered by a Minister of the Crown, with a permanent salaried officer in charge of the central executive office, and a deputy in each State.

### POSTAL SERVICES.

Post offices have been established throughout the State, even in localities where there are few residents. If the volume of business does not warrant the establishment of a full service, receiving offices are opened for the collection of mail matter for conveyance to and from the nearest post office. Including receiving offices, there were 2,472 post offices in the State at 30th June, 1936. Of these 407 were official, 22 semi-official, and 2,043 non-official. The transport of mails in outlying districts has been expedited considerably in recent years by reason of an extended use of motor vehicles and by a few aerial services. The number of inland mail services in operation in New South Wales in 1935-36 was 2,081. The cost of road services amounted to £224,074, and of railway services to £145,248.

Ocean mail services are conducted in accordance with arrangements made between the Commonwealth Government and the steamship owners. Some of the services between Australia and the Pacific Islands are subsidised by the Commonwealth, and the Orient Steamship Company receives £110,000 per annum for a four-weekly service with Europe. Mails are conveyed along other routes at poundage rates. They are despatched at least once a fortnight to Europe, *via* Suez, and there is regular communication with America and with Eastern ports.

The number of letters, postcards, lettercards, and packets posted in New South Wales in 1935-36 for delivery within the Commonwealth of Australia was 305,912,300; the number despatched beyond the Commonwealth was 9,723,400, and 11,103,100 were received from places outside Australia. Similar details regarding newspapers are as follows:—62,563,500 posted for delivery within the Commonwealth; 2,147,400 despatched overseas; and 6,966,900 received from places outside Australia.

Particulars regarding the postal matter received from the other Australian States are not available. In 1935-36 the parcels posted in New South Wales for delivery in the Commonwealth numbered 3,600,506, and 101,868 were posted for delivery in other countries, the number received from overseas being 124,352. The postage collected on parcels amounted to £256,460. The number of registered articles (other than parcels) posted in New South Wales for delivery in Australia was 2,567,002; and 146,164 were despatched to, and 195,745 were received from other countries.

The Dead Letter Office handled 1,096,251 letters and postcards and 917,872 packets and circulars. Of the former, 986,295 were returned direct to the writers or delivered, 67,827 were destroyed, and 42,129 returned as unclaimed to other countries; and of the latter 837,708 were returned direct to the writers or delivered, 82,237 were destroyed, and 1,927 returned as unclaimed to other countries. Money and valuables amounting to £31,450 were contained in postal articles sent to the Dead Letter Office.

A system of value-payable parcel post has been established, mainly for the convenience of people who reside at a distance from the trading centres. The Department accepts for transmission within the Commonwealth parcels or letters sent in execution of orders, and collects from the addressees

on behalf of the senders the charges due thereon. The system applies also to registered articles transmitted to or from Papua. During the year ended 30th June, 1936, the number of such articles posted in New South Wales was 324,800. The value collected was £389,595, and the revenue, that is postage and commission, £43,285.

Postage rates for letters to places within the British Empire were increased in August, 1930, from 1½d. to 2d. per oz.

#### TELEGRAPHS AND CABLES.

The telegraph system embraces the whole Commonwealth. It has been extended steadily since January, 1858, when the system was opened to the public in New South Wales, and modern equipment has been installed in the chief centres to expedite the transmission of messages.

Cable communication with Europe and other countries is supplied by various routes leaving Australia at four different points, Sydney, Cottesloe (Fremantle), Southport (Queensland), and Darwin.

The oldest, dating from 1871, is from Darwin via Java and Singapore. Two routes are available—from Cottesloe (Fremantle) to Cocos Island, where they branch to London via Durban (South Africa) on the one side, and to the East via Singapore on the other.

From Sydney two routes are available, using the cables laid by the Pacific Cable Board to New Zealand and Canada. The first is via Southport (Queensland) and Norfolk Island to Suva, and the second via Auckland (New Zealand) to Suva. From Suva the duplicate route is via Fanning Island and Canada to London or American countries.

The Pacific Cable Board's system was purchased by Cable and Wireless, Limited, from the Governments (British, Canadian, etc.) who owned it when the Empire merger of cable and wireless communications was arranged in 1929.

Lines have also been laid between the Australian mainland and Tasmania. A cable between Bundaberg (Queensland) and New Caledonia was maintained for many years by a French company, but a wireless link has been substituted and the cable has been abandoned.

The Eastern Extension Australasia and China Telegraph Company Limited, in association with Cable and Wireless Limited (London), controls all cables leaving Australia, except that linking Tasmania with the mainland.

For a cable message to Great Britain, the ordinary rate is 2s. per word, and five-letter code messages are charged three-fifths the ordinary rate. Deferred cablegrams written in plain language and subject to a delay not exceeding twenty-four hours may be exchanged at half the ordinary rates with Great Britain, and with most other British and foreign countries. Daily letter telegrams with normal delivery on the morning of the second day after the day of acceptance may be exchanged with a number of countries at one-third of the ordinary rates and a minimum charge for twenty-five words. Press telegrams are handled by telegraph or cable at cheap rates under special conditions.

The following table shows the number of telegrams despatched in New South Wales for delivery within the Commonwealth, including messages to Tasmania and the number of cablegrams despatched to and received

from countries outside Australia, in various years since 1901. The total number of telegrams handled in New South Wales cannot be stated, as full particulars are not available regarding messages received from other States. Cablegrams and telegrams in transit through the State are not included.

Year.	Telegraph Stations.	Telegrams despatched for delivery in Australia.	Cablegrams.		Revenue Received.
			Despatched.	Received.	
					£
1901	978	2,669,724	59,360	72,735	186,135
1911	1,406	4,314,252	129,809	123,910	253,398
1920-21	2,252	5,906,243	249,705	263,482	489,805
1925-26	2,894	6,214,370	350,146	350,129	516,176
1928-29	3,069	5,972,606	415,813	388,093	526,508
1930-31	3,055	4,609,851	326,857	282,253	384,452
1931-32	3,072	4,362,975	301,117	287,696	354,296
1932-33	2,978	4,416,168	311,142	298,814	347,707
1933-34	2,997	4,704,809	322,382	321,493	370,869
1934-35	3,025	5,088,853	332,859	324,575	409,137
1935-36	3,042	5,473,040	343,896	335,051	433,810

The revenue from the telegraph business reached its peak in 1928-29 and then declined steadily until 1932-33. In 1935-36 it showed an increase of £24,673 on the previous year.

#### WIRELESS TELEGRAPHY.

During the years 1912 to 1914, a chain of stations was erected around Australia by the Commonwealth to give wireless communication with shipping, three of the stations, including the Sydney station, being capable of long distance communication. The stations were controlled by the Department of the Navy during the years 1915 to 1920. In May, 1922, the commercial radio stations were transferred, under an agreement with the Federal Government, to the Amalgamated Wireless (Australasia), Limited, in which the Commonwealth has a controlling interest. The company undertook to erect a high-power station in Australia for communication with Great Britain and Canada, where corresponding stations were to be established. In consequence of the development of the beam system the agreement was altered in 1924, and instead of high-power stations, services under the beam system have been provided. The service between Australia and Great Britain was opened on 8th April, 1927, and between Australia and Canada on 16th June, 1928. The rate for ordinary messages is 1s. 8d. per word to Great Britain and 1s. 5½d. to Vancouver (Canada). Deferred messages are cheaper.

Paid messages by beam from New South Wales (including Federal Territory) during 1936-37 numbered 158,706, equivalent to 3,534,374 words, and to New South Wales 164,091, or 4,251,597, words, and during 1935-36 from New South Wales 144,793, equivalent to 3,224,536 words, and to New South Wales 133,037 or 3,447,000 words. The ratio of the number of words to the number of messages in the case of the inward traffic is somewhat greater than the ratio in respect of outward traffic and is due to the preponderance of press messages received from abroad, the number of words in which in the majority of cases exceeds considerably those comprising ordinary messages.

Coastal radio traffic during 1935-36 consisted of 92,950 paid messages, 1,712,528 words; 5,038 service messages, 50,287 words; and 3,107 weather messages, 85,728 words; and during 1936-37 of 96,165 paid messages, 1,780,447 words; 7,944 service messages, 84,680 words; and 6,808 weather messages, 133,751 words.

Private installations for wireless communication and for broadcasting are operated under license, but they are not permitted to engage in commercial traffic unless authorised to do so. A national broadcasting service was inaugurated in July, 1929, and two private stations in New South Wales were transferred to the control of the Commonwealth Government. The programme services were provided by private enterprise under contract with the Commonwealth Government until 1st July, 1932, when the Australian Broadcasting Commission undertook the work. At 30th June, 1937 there were 6 national broadcasting stations operating, of which two were in the metropolitan area and one each at Corowa, Newcastle, Grafton and Orange.

Licensed broadcasting stations at this date numbered 25, of which 6 were in the metropolitan area and 19 in the country. Also one licensed station operated in the Federal Capital Territory.

Wireless licenses in force in New South Wales (excluding the Federal Capital Territory) at 30th June, 1933 to 1937, were as follows:—

Licenses.	In force at 30th June—				
	1933.	1934.	1935.	1936	1937.
Station—					
Coast ... ..	2	2	2	2	2
Ship ... ..	21	16	22	75	92
Land ... ..	8	8	9	8	8
Broadcasting* ... ..	14	16	17	23	25
Broadcast listeners ... ..	177,386	225,897	277,576	314,426	356,859
Experimental ... ..	383	454	512	605	676
Portable ... ..	9	9	11	12	13
Aircraft ... ..	...	...	6	1	5
Special ... ..	26	26	29	32	34
Total ... ..	177,849	226,428	278,184	315,184	357,714

\* Excluding National Broadcasting Stations.

On 30th June, 1937, there were in force in the Federal Capital Territory one broadcasting license, 1,433 broadcast listeners' licenses, and 8 experimental licenses; and on 30th June, 1936, 1 broadcasting license, 1,305 broadcast listeners' licenses, and 4 experimental licenses.

In 1933 the number of broadcast listeners' licenses in force in New South Wales was 177,386, and increased progressively until 1937, when the number was 356,859, an increase of 179,473, or more than 100 per cent. At 30th June, 1937, experimental licenses numbered 676, an increase since 1933 of 293. Experimental licenses extend to holders the same privileges as conferred by listeners' licenses.

The revenue collected in New South Wales in respect of broadcast listeners' licenses in 1936-37 amounted to £375,859, of which £161,254 accrued to the Post Office. The collections during 1935-36 totalled £331,707, of which the Postmaster-General's Department took £142,241.

An overseas radio telephone service was established in April, 1930, when a commercial service was opened between Australia and Great Britain. It has been extended to other European countries, America, Africa, New Zealand, India, Java, Sumatra, New Guinea, Palestine and Iceland.

A beam wireless picturegram service was established on 16th October, 1934, between Australia and Great Britain and North America. Also the first wireless beacon in Australia for aircraft (on an experimental basis) came into operation at North Brighton (Sydney) on 27th April, 1936.

#### TELEPHONES.

The telephone system was established in Sydney in 1880, and the system has been installed in a large number of country districts. In the Metropolitan district a number of automatic exchanges are in operation. Trunk lines serve a wide area of the State, and a line between Sydney and Melbourne was brought into use in 1907, and between Sydney and Brisbane in 1924. During the years 1930 and 1931 the services were extended to Northern Queensland and to Western Australia. The "carrier wave" system of operating long-distance telephone traffic was introduced in September, 1925. By this means a number of conversations may be conducted simultaneously over one pair of wires.

The following table shows the growth of the telephone service in New South Wales since 1901:—

Year.	Exchanges.	Number of Lines Connected.	Public Telephones.	Telephone Instruments connected.
1901	*48	9,864	72	13,778
1911	*268	34,551	722	43,032
1920-21	*921	74,490	1,693	96,710
1925-26	*1,621	117,249	2,379	152,969
1928-29	1,890	146,492	2,779	193,718
1929-30	1,951	150,606	2,879	199,007
1930-31	1,946	141,445	2,944	188,345
1931-32	1,942	135,179	2,986	181,326
1932-33	1,935	135,859	3,229	182,992
1933-34	1,935	139,485	3,353	188,694
1934-35	1,951	150,257	3,459	202,363
1935-36	1,969	160,323	3,561	215,803

\* Prior to 1920-1927 offices with only one line connected were not included.

At 30th June, 1936, there were 1,969 telephone exchanges with which 160,323 lines were connected. The instruments in use numbered 215,803, in which were included 210,099 subscribers' instruments, 3,561 public telephones, and 2,143 connected with private lines. The revenue derived from the telephone services during the year amounted to £2,646,392.

The annual ground rent for an exclusive telephone service ranges from £3 in respect of exchanges where the number of subscribers' lines does not exceed 300, to £4 10s. for a residence service and £5 10s. for a business service where there are over 10,000 lines. For each effective outward call where the number of lines connected with the exchange does not exceed 300, a charge of 1d. per call is made; at other exchanges the charge is 1½d.

## FINANCIAL RESULTS OF POSTAL SERVICES.

Particulars regarding the financial results of operations in the various branches of the Postmaster-General's Department in New South Wales during the year ended 30th June, 1936, are as follows:—

Branch.	Earnings.	Working Expenses.	Surplus.	Interest on Capital and Exchange Charges.	Net Profit.
	£	£	£	£	£
Postal ... ..	2,699,425	1,837,857	861,568	65,887	795,681
Telegraph ... ..	480,621	428,653	51,968	49,364	2,604
Telephone ... ..	2,646,392	1,592,115	1,054,277	567,925	486,352
Wireless ... ..	133,516	77,799	55,717	4,020	51,697
Total, All Branches ... ..	5,959,954	3,936,424	2,023,530	687,196	1,336,334

The total surplus for the year amounted to £1,336,334, an increase of £263,171 upon that for 1934-35. The postal branch showed the greatest net profit, at £795,681, the telegraph branch having converted a loss of £4,865 during 1934-35 to a profit of £2,604 in 1935-36.

A comparative statement of finances for the past five years is shown below:—

Year ended 30th June.	Earnings.	Working Expenses.	Surplus.	Interest on Capital and Exchange Charges.	Net Profit.
	£	£	£	£	£
1932	4,874,758	3,541,374	1,333,384	961,324	372,060
1933	4,904,797	3,422,405	1,482,392	942,264	540,128
1934	5,205,354	3,562,269	1,643,085	768,944	874,141
1935	5,575,538	3,728,092	1,847,446	774,283	1,073,163
1936	5,959,954	3,936,424	2,023,530	687,196	1,336,334

The net profit in 1929 was £92,670, and has increased each year since, except in 1931, when it fell to £54,923. It reached the peak in 1936 at £1,336,334.

## EMPLOYEES.

At 30th June, 1936, there were 15,319 persons employed by the Postal Department in New South Wales. Of these, 8,757 were permanent employees, 2,332 non-official postmasters, 609 telephone office keepers, 2,371 mail contractors (including drivers), and there were 2,621 others.

## LAND TRANSPORT.

The problem of establishing an efficient system of transport in New South Wales was rendered difficult by several causes, viz., the existence of a belt of rugged highlands comparatively near the coast readily passable at only a few points; the consequent difficulty in connecting the coast with the interior; the absence of navigable rivers and waterways; and the scattered nature of the settlement.

The rugged approaches to the Great Dividing Range defied the efforts of explorers until 1813, when an expedition succeeded in crossing the mountains, and the first road over the range was opened in 1815. Shortly afterwards a way was discovered across the mountains in the vicinity of Lake George, near the spot where Goulburn now stands. These routes remained the easiest lines of communication with the interior to the west and south, and when railways were built they followed the roads. Strangely enough, the only real gap in the mountains, situated opposite Newcastle, and discovered by Cunningham in 1825, has not yet been utilised for traffic. The Great Northern Railway traverses the mountains by way of a higher gap at Murrurundi.

The early policy of the government made Sydney the centre of the whole settlement commercially as well as politically. With the advantageous situation on an unrivalled natural harbour, it became from the earliest times the point from which the roads radiated, and to which trade and commerce were drawn, despite the facts that its immediate district was not well adapted for agriculture and that access to the fertile interior was impeded by difficult mountains. In point of situation Port Stephens and Jervis Bay, excellent natural harbours situated respectively 85 miles north and 82 miles south of Sydney, are both qualified to constitute commercial outlets for the interior, especially Port Stephens, which is the most central port of the State and has the advantage of large coal supplies in close proximity. The development of this port has been urged strongly as part of a decentralisation scheme, and Jervis Bay may eventually become a shipping centre. There is not a good harbour north of Port Stephens; and Twofold Bay, on the far South Coast, is probably too difficult of access from the interior to develop into an oversea shipping port.

The interior of New South Wales is connected with the sea by rail at Sydney, Newcastle, and Port Kembla. The North Coast railway which runs parallel with the coast line, touches the seaboard at Coffs Harbour. One of its branches runs to Byron Bay near the northern extremity and another traverses the coastal strip to Dorrigo on the western side of the line but does not yet extend across the Dividing Range. Parts of the southern Riverina are served by border railways which form part of the Victorian Government system giving access to ports on the southern coast of Australia.

In view of its vast spaces New South Wales is especially adapted for aviation, and facilities for transport by air are available on a number of routes.

### *Land Transport Services.*

The railways and tramways in New South Wales, with the exception of the Victorian Government lines in the Riverina and a few private lines, are the property of the State. Other land transport services are conducted, as a general rule, by private enterprise though there are a number of Government motor omnibus services in the metropolitan district.

Since the passing of the Transport Act in June, 1930, there has been a series of important changes in respect of the administration of these services. At that time the railways and tramways were controlled by the same statutory body, which consisted of three Commissioners appointed by

the Governor, the other land transport services were subject to a measure of supervision by the police and local authorities, and matters relating to the maintenance and construction of main roads were administered by the Main Roads Board. Large sums of money had been expended by the Main Roads Board on the improvement of the highways, and motor transport services for both passenger and goods traffic had expanded rapidly to the detriment of the railway and tramway revenues.

The Transport Act—which relates to land transport services, except railways—was designed to effect an improvement in the tramway services and to provide a greater measure of control over privately-owned motor services with the object of eliminating wasteful duplication. A Commissioner of Road Transport was appointed to administer the Act, transport trusts were constituted to supervise the services in the metropolitan and Newcastle districts, the tramways were removed from the control of the Railway Commissioners and vested in the transport trusts to be administered by a management board, and the Government was authorised to appoint advisory committees from time to time to report upon matters relating to transport.

The Metropolitan Transport Trust was appointed in terms of the Transport Act in August, 1930, to exercise supervision in a district comprised by the county of Cumberland, and the parish of Cowan, in the county of Northumberland, was added by proclamation on 1st October, 1930. The Newcastle and District Transport Trust was appointed in October, 1930, for an area embracing the city of Newcastle, its suburban municipalities and parts of the Tarro and Lake Macquarie Shires. The trusts had the exclusive right of operating tramway services, they were empowered to levy special license fees in respect of motor omnibus services, and in assessing the fees to take into consideration the measure of competition with the tramways.

In August, 1931, the State Transport (Co-ordination) Act was passed and the State Transport (Co-ordination) Board was appointed for the purpose of improving and co-ordinating the services and facilities relating to transport. The board was required to furnish a report to the Government as to steps to be taken to co-ordinate the activities of the various transport authorities and the Main Roads Board, and to provide for the administration of the services under one corporate body. The Act also contained provisions which commenced on 2nd November, 1931, imposing further obligations upon persons conducting motor transport services and gave the board authority to levy special charges in respect of passengers and goods carried in motor vehicles.

Legislation for merging the transport administrative authorities was embodied in the Ministry for Transport Act passed in March, 1932. A Department of Transport was created under a responsible Minister of the Crown, the offices of the Railway Commissioners, the Transport Trusts, the Commissioner of Road Transport, the Tramways Management Board, the Main Roads Board, and the State Transport (Co-ordination) Board were abolished, and their functions were transferred to a Board of Transport Commissioners comprised by a Chief Commissioner, seven other Transport Commissioners to supervise the various branches of the Department, and the Commissioner of Police.

After a short period another important change was made in terms of the Transport (Division of Functions) Act, 1932, which was proclaimed on 29th December, 1932. The Board of Transport Commissioners was abolished, the Ministry of Transport was divided into three departments, each under the control of a Commissioner, viz., (1) railways, (2) road transport and tramways, (3) main roads, and authority was given for the appointment of an assistant commissioner in each department.

## ROADS AND BRIDGES.

*Length of Roads.*

Statistics as to roads are collected at intervals. In 1936 the length of roads in the State was estimated to be 128,475 miles, of which 4,582 miles were in the metropolitan area as defined under the Local Government Act, 116,611 miles in country municipalities and shires, and 7,282 miles in the unincorporated Western Division.

The nature of the roads may be seen in the following statement:—

Nature of Road, Street or Lane.	Division.			
	Municipalities.	Shires.	Western Division.	Total N.S.W.
	miles.	miles.	miles.	miles.
Concrete ... ..	245	88	...	333
Wood-paved ... ..	32	...	...	32
Premixed Tar ... ..	589	250	...	839
Penetrated Tar ... ..	1,761	1,195	...	2,956
Waterbound Macadam ...	1,429	4,348	...	5,777
Gravel ... ..	2,385	21,088	512	23,985
Formed only ... ..	1,726	21,156	1,157	24,039
Cleared only ... ..	1,186	26,332	3,079	30,597
Natural Surface ... ..	895	36,488	2,534	39,917
Total ... ..	10,248	110,945	7,282	128,475

The principal roads leading southward from Sydney are the Prince's Highway (348 miles) traversing the coastal districts to the Victorian border, and the Hume Highway (370 miles) via Goulburn and Gundagai to Albury. The Monaro Highway (226 miles) connects Tathra and Bega on the coast with the Hume Highway near Lower Tarcutta via Cooma and Tumut. The Federal Highway (42 miles) branches from the Hume Highway near Yarra, to Canberra via Collector, and from Canberra a road 23 miles in length runs to the Hume Highway near Yass, via Hall and Murrumbateman.

The northern highways are the Pacific Highway (599 miles), traversing the coastal districts from North Sydney to Newcastle, thence via Hexham and the coastal towns to the Queensland border at Coolangatta; the New England Highway (453 miles) from Hexham, thence via Maitland and along the tablelands through Glen Innes and Tenterfield to the Queensland border near Mount Lindesay. The Oxley Highway (379 miles) branching from the Pacific Highway near Wauchope connects the coast with the Mitchell Highway at Trangie, and the Gwydir Highway (326 miles) branches from the Pacific Highway at South Grafton westerly to Collarenebri via Glen Innes, Inverell and Moree.

The Great Western Highway (131 miles), from Sydney, connects with the Mid-western and Mitchell Highways at Bathurst. The Mid-western Highway (326 miles) runs from Bathurst to Hay via Cowra and Wyalong, and the Mitchell Highway (428 miles) from Bathurst via Orange, Dubbo, Trangie, Nyngan and Bourke to the Queensland border at Barrington. The Barrier Highway (400 miles) branches from the Mitchell Highway at Nyngan and runs westerly via Cobar, Wilcannia and Broken Hill to the South Australian border at Cockburn.

In the south-west the Sturt Highway (472 miles) branches from the Hume Highway at Lower Tarcutta and runs westerly, partly following the Murrumbidgee River via Wagga, Hay, Balranald and Wentworth to the South Australian border near Lake Victoria.

A road 16 miles in length between Lansdowne and Hornsby connects the Hume and Pacific Highways.

### *Supervision of Roads.*

Prior to the enactment of legislation providing for the incorporation of shires, the State was divided into road districts, each under the supervision of an officer directly responsible to the Commissioner for Roads. These officers had under their care the greater part of the roads and bridges of the State outside the municipalities, and the municipal councils were generally responsible for those within the incorporated areas. Road trusts formed under various Acts had the supervision of the expenditure of certain grants for the maintenance of roads in districts chiefly of minor importance as well as some important roads in the vicinity of the metropolis.

When the local government system was extended over the whole of the eastern and central divisions of the State by the Local Government Act of 1906 the councils of the municipalities and shires took over the administration of the roads, bridges, etc., under the control of the Roads Department, with the exception of those in the unincorporated areas of the Western Division, and certain bridges and ferries proclaimed as "national works." The Act provided for the payment of endowment to municipalities and shires, the minimum endowment payable to shires being fixed at £150,000 per annum, and the Minister was empowered to withhold payment of endowment from a council if his requirements in respect of main roads were not satisfied.

Between 1906 and 1912 the amount of endowment allotted to shires was increased from £150,000 to £360,000, but the expenditure by the councils on the important roadways was not sufficient to maintain them in a serviceable condition. It was decided, therefore, to reduce the amount of general endowment to the minimum, and to make a separate vote to councils for the upkeep of the main roads. This arrangement was continued until the rapid development of motor transport led to a change and the Main Roads Act was passed in 1924 to place the main roads under the supervision of a board.

### *Main Roads Administration.*

The Main Roads Act, 1924, was brought into operation by proclamation as from 1st January, 1925. The first Main Roads Board was appointed in the following month and commenced operations on 12th March, 1925. The Board functioned for a period of seven years then its work was transferred to the control of a Board of Transport Commissioners to be administered in co-ordination with the railways and tramways and other transport services. Subsequently the main roads administration was reorganised as a separate department in the Ministry of Transport under the control of a commissioner who, with an assistant commissioner, was appointed for a term of seven years (see page 906).

Under existing arrangements the Main Roads Department exercises control over all Governmental activities in connection with road works. These activities embrace works on main and developmental roads throughout the State, all roads in the unincorporated portion of the Western

Division and proclaimed national works, principally bridges and ferries, which were constructed from Government funds. Previously the care of roads in the Western Division and national works were under the control of the Public Works Department. In 1928, however, national works on main roads were transferred to the Department of Main Roads and the balance of the roads and bridges activities of the Public Works Department was transferred in September, 1935.

The Main Roads Department co-operates with the municipal and shire councils in the work of constructing and maintaining a well-organised system of main highways, with the primary object of developing the lands in the State, of feeding the railways with traffic, of giving the primary producers access to markets, and of providing facilities for modern motor traffic.

Public roads except those within the City of Sydney, may be proclaimed as main roads upon the recommendation of the Commissioner. The most important classes of main roads are (1) the State highways which form the principal avenues of road communication between the coast and the interior or throughout the State and connect with similar avenues in other States; (2) trunk roads which are the secondary avenues, forming with the State highways the framework of a general system of inter-communication throughout the State; (3) ordinary main roads which are those not classified as highways or trunk roads. Any road not being a main road, may be proclaimed as a developmental road if it will help to develop a district, and in 1936 provision was made for the declaration of developmental works, *i.e.*, works carried out on portion of a road. A portion or the whole cost of construction of developmental roads and works may be provided from a fund formed in the Main Roads Department for the purpose.

A classification of the main roads in the State at 30th June, 1936, is shown below:—

Class of Road.						County of Cumberland.	Country.	Total.
						Miles.	Miles.	Miles.
State Highways	...	...	...	...	...	193	3,653	3,846
Trunk Roads	...	...	...	...	...	...	2,424	2,424
Ordinary Main Roads	...	...	...	...	...	441	8,543	8,984
Total						634	14,620	15,254

There were, in addition, 2,379 miles of developmental roads, of which 19 miles were in the County of Cumberland.

The terms of the Main Roads Act require that the moneys of the Main Roads Department be kept in separate funds: (1) the County of Cumberland Main Roads Fund for metropolitan main roads, *i.e.*, those in the County of Cumberland which, for the purposes of the Act, is deemed to include the municipalities of Katoomba and Blackheath, and the shire of the Blue Mountains, also small sections of the Bulli, Colo, and Blaxland

shires added in 1929; (2) the Country Main Roads Fund; (3) the Developmental Roads Fund. Another fund—the Federal Aid Roads Fund—was kept for moneys to be applied to road works in terms of an agreement between the States and the Commonwealth, as described later. In consequence of an amendment of the agreement this fund was closed at 30th June, 1934, upon the completion of all outstanding works.

The income of the two Main Roads funds is derived chiefly from (a) the proceeds of taxes in respect of motor vehicles; (b) grants from the Federal Government; (c) contributions by municipal and shire councils; (d) loan moneys appropriated for the main roads.

The resources of the Developmental Roads Fund are now derived from loan appropriations of the State Government. Until 1930-31 substantial grants were received on occasions from the proceeds of Commonwealth petrol tax and State revenues, while amounts of £135,000 in 1933-34 and 1934-35 and £67,500 in 1935-36 were transferred under statutory provision from the Country Main Roads Fund.

Grants to the various funds from State revenues were substantial in the initial stages of the Department's operations, but they have since been of small amount, except in 1930-31 when payments were made from unemployment relief funds. The total amount of such grants up to 30th June, 1937, was £745,938, of which £616,265 was received during the three years 1925-26 to 1927-28, and £113,296 in 1930-31.

The proceeds of taxation in respect of motor vehicles owned by residents of the metropolitan district are apportioned in equal shares between the two Main Roads funds, and the Country Main Roads fund receives the taxes on motor vehicles registered in the country. This fund receives payments also from funds controlled by the Commissioner for Road Transport, into which motor registration and license fees and taxes and fees in respect of motor omnibus services are paid to meet the cost of registration and collection of taxes and certain costs of the transport services, such as police supervision of traffic and the maintenance of roads used by motor omnibuses.

The councils in the metropolitan road district may be required to contribute to the County of Cumberland Main Roads Fund at a rate not exceeding  $\frac{1}{2}$ d. in the £ of the unimproved capital value of rateable property. The rate was fixed at the maximum  $\frac{1}{2}$ d. in the £ for the years 1925 to 1932 inclusive, and was then reduced in the following years to  $\frac{1}{8}$ d.. The rate payable in respect of land used for agricultural and pastoral purposes, or land in the City of Sydney, is one-half the rate levied on other lands in the district.

Contributions by country councils to the Country Main Roads Fund depend upon the amount expended on the main roads, the maximum in any year being the sum equal to a rate of  $\frac{1}{2}$ d. in the £ on the unimproved capital value of rateable property. Usually contributions by country councils are not paid to the Department's funds as in the case of metropolitan councils, but are applied directly in meeting the share of cost of works borne by the councils.

The main roads funds are expended on the construction and maintenance of main roads in the respective districts, the payment of administrative expenses and interest, sinking fund and other charges on loans.

The County of Cumberland and Country Main Roads Funds are required to pay interest, sinking fund and other charges on the full amount of their loan indebtedness to the State Government, but the Developmental Roads Fund was released from all liability in respect of its loan indebtedness as from 1st January, 1936. Until 30th June, 1933, the main roads funds were charged with full liability only in respect of loan debt incurred subsequent to 30th June, 1928; liability in respect of loan debt incurred up to 30th June, 1928, was limited to one-half in the County of Cumberland and to such charges in respect of country main roads as were payable by councils. The Developmental Roads Fund was liable until 30th June, 1933, only in respect of loan charges collected from councils, and thereafter until 31st December, 1935, for the full amount of charges on loan debt incurred up to 30th June, 1931.

In the metropolitan district, where the levy on councils is compulsory, the whole cost of construction and maintenance of main roads is paid from the funds of the Main Roads Department, but the actual work may be done by the councils.

In the country districts assistance in respect of road works may be granted by the Department to the council of any area through which a main road passes, and the council may be required to contribute part of the cost of the work as prescribed by the Act. Voluntary offers from the councils to pay a greater proportion of the cost than is prescribed may be accepted; or, in special circumstances, the whole cost of any particular work may be paid from the roads funds or the cost may be advanced to be repaid by the councils. The proportion of the cost of works on country roads borne by the Department of Main Roads varies with the class of roads. From 1st July, 1928, the Department has paid the whole cost of works on State highways in the country, and at least two-thirds of the expenditure on trunk roads and half the cost on ordinary main roads. From 1st July, 1936, the proportion of cost borne by the Department was increased to three-quarters in respect of trunk roads and two-thirds for ordinary main roads. Additional assistance has been granted since 1st November, 1932, for bridge construction, viz., the whole cost of bridges over 20 feet span on trunk roads and three-fourths on ordinary main roads.

The cost of constructing developmental roads and works is borne in full by the Main Roads Department but, upon completion, local councils are required to maintain such roads and works in satisfactory condition. Under early provisions of the law councils were required also to pay for a period of twenty years interest on loans expended on developmental roads. They were released from the obligation to pay interest on new loan expenditure subsequent to 30th June, 1928, and their liability in respect of loans expended up to 30th June, 1928, ceased as from 1st July, 1935.

As a special emergency measure the sum of £200,000, viz., £46,000 from the Cumberland Main Roads Fund and £154,000 from the Country Main Roads Fund, was transferred to Consolidated Revenue in 1932-33.

#### *Commonwealth Grants for Main Roads.*

Apart from the assistance granted by the State Government for the construction and upkeep of roads, the Commonwealth Parliament, in each year from 1st July, 1923, to 30th June, 1926, appropriated moneys to assist the States in regard to roads. The amounts of the Federal grants were paid into a trust fund at the Commonwealth Treasury, and made available to the States as expenditure approved by the Federal authorities was incurred.

In 1926 the Federal Government amended the system of federal aid for road construction. The Federal Aid Roads Act was passed to authorise the Commonwealth to contract agreements with the various States, providing for the distribution among the States of a sum of £20,000,000 in ten equal annual instalments for the construction and reconstruction of federal aid roads defined as—(i) Main roads which open up and develop new country; (ii) trunk roads between important towns; (iii) arterial roads to carry the concentrated traffic from developmental, main trunk, and other roads. It was provided that at least one-fourth of all moneys expended under the Act should be on construction. The annual instalments were allocated amongst the States on the basis of three-fifths population and two-fifths area.

The funds provided by the Commonwealth were obtained from Customs duties on motor-cars and motor accessories, and each State participating in the scheme was required to expend a minimum amount equal to three-fourths of the sums provided by the Commonwealth. The State's share might be derived either from loans or from State revenue, at least one-eighth of it being derived from revenue, and the amount derived from loans was subject to a sinking fund of 3 per cent. per annum at a rate of interest sufficient to extinguish the indebtedness in twenty years. In terms of the agreement which was signed in June, 1927, New South Wales received an annual grant of £552,000 from the Federal Government, and was required to provide annually from its own resources £414,000, including at least £51,750 from revenue.

In 1931 the agreement was amended. The States were relieved of the duty of providing pro rata contributions as from 1st February, 1930, and the Commonwealth agreed to continue the annual grant at the existing rate until 30th June, 1931, then to grant until 31st December, 1936, (subsequently extended to 30th June, 1937), the amount yielded by a customs duty of 2½d. per gallon on petrol imported into Australia and an excise duty of 1½d. per gallon on petrol refined in Australia. Moreover, the use of the money available from the petrol tax was extended to maintenance and repairs as well as construction, and the limitation of the classes of roads upon which the money could be expended was removed.

Upon expiry the agreement was renewed for a further period of ten years, as from 1st July, 1937, and under it the rate of Commonwealth grant was increased to 3d. per gallon on petrol imported and 2d. per gallon on the bulk of the petrol locally refined. The purposes to which the increased grant, representing the proceeds of ½d. per gallon on petrol, may be applied include as well as road works other works connected with transport, and the Commonwealth Government may require the expenditure of one-twelfth of the increased grant upon the maintenance of roads of approach to Commonwealth properties. As from 1st July, 1937, the sinking fund contribution in respect of State loan expenditure under the 1926 agreement was reduced from 3 per cent. per annum to 2½ per cent. per annum.

During the period 1927-28 to 1930-31 the operations of the Main Roads Department in connection with federal aid roads were conducted through the Federal Aid Roads Fund, into which was paid the bulk of the receipts from the Commonwealth petrol tax. In subsequent years, however, the receipts have been apportioned between the County of Cumberland and Country Main Roads Funds in the same ratio as the receipts from State motor taxation. The Federal Aid Roads Fund was not closed until 30th June, 1934, when the programme of works was completed.

Details of the income and expenditure of the funds of the Main Roads Department for the financial years ended 30th June, 1933, to 1937, are shown below, also the total amounts from 12th March, 1925, to 30th June, 1937:—

Particulars.	1933-34.	1934-35.	1935-36.	1936-37.	Total to 30th June, 1937.
<i>Income.</i>	£	£	£	£	£
Motor taxes, fees, etc. ...	1,374,053	1,460,155	1,797,934	1,882,071	16,440,999
Contributions by Councils ...	250,752	247,052	247,711	244,116	3,786,505
Loans raised by Councils ...	...	...	...	...	693,613
State Appropriations—					
From Revenue ...	1,050	...	...	...	745,938
From Loans ...	222,092	329,223	274,674	455,860	6,413,871
Federal Grants ...	581,885	653,176	739,540	811,476	7,008,135
Miscellaneous ...	53,103	56,071	137,359	72,614	698,393
<b>Total ...</b>	<b>£ 2,482,935</b>	<b>2,745,677</b>	<b>3,197,218</b>	<b>3,466,137</b>	<b>35,787,454</b>
<i>Expenditure.</i>					
Construction ...	1,039,179	1,298,284	1,102,219	1,348,539	18,216,583
Maintenance ...	1,109,676	1,381,430	1,368,575	1,569,719	12,387,739
Loans—					
Repayment and Sinking Fund ...	192,701	191,842	204,182	206,095	1,840,587
Interest ...	232,911	211,789	190,130	155,947	1,570,771
Exchange and Management ...	32,295	26,573	25,057	18,999	141,453
Administrative Expenses ...	63,699	76,776	80,943	86,816	843,725
Miscellaneous ...	3,187	2,163	843	575	70,901
<b>Total ...</b>	<b>£ 2,673,648</b>	<b>3,188,857</b>	<b>2,971,949</b>	<b>3,386,690</b>	<b>35,071,759</b>

The most important item of income is motor taxes, fees, etc., from which 54.30 per cent. of the total income in 1936-37 was derived as compared with 23.41 per cent. from Federal grants, 13.15 per cent. from State loan appropriations and 7.04 per cent. from councils' contributions. The proportionate distribution of the aggregate income up to 30th June, 1937, according to the various sources from which it was obtained was: motor taxes, fees, etc., 45.94 per cent.; Federal grants, 19.58 per cent.; loans, 19.86 per cent.; councils' contributions, 10.58 per cent.; State revenue grants, 2.09 per cent.; and miscellaneous, 1.95 per cent.

The contributions by councils amounted to £431,012 in 1928-29, but they have declined since, largely as a result of the fall in property values and the levy of a reduced rate in 1933 and subsequent years.

The maintenance of roads and bridges accounted for 46.35 per cent. of the total expenditure during 1936-37, construction for 39.82 per cent., loan redemption for 6.09 per cent., interest, exchange, etc., for 5.16 per cent., administration for 2.56 per cent. and miscellaneous items for 0.02 per cent.

The amount spent annually on the construction of roads and bridges exceeded that on maintenance up to 1930-31, at the end of which year the respective aggregates were £12,180,254 and £4,931,823. Expenditure on maintenance was the greater in subsequent years, however, and during the period 1931-32 to 1936-37 aggregated £7,455,916 as compared with £6,036,329 expended on construction.

Of the aggregate expenditure to 30th June, 1937, the sum of £1,840,587 was utilised in providing for the redemption of loans, the larger portion of which had been already included under the head of construction. Deducting this element of double accounting, the aggregate expenditure to 30th

June, 1937, on road works and annual charges other than debt redemption was £33,231,172, of which 54.82 per cent. was disbursed on construction, 37.28 per cent. on maintenance, 5.15 per cent. on interest, exchange, etc., 2.54 per cent. on administration, and 0.21 per cent. on miscellaneous items.

Details of the expenditure and income of each of the funds during the year 1935-36 are shown in the following statement:—

Particulars:	Cumberland Main Roads.	Country Main Roads.	Develop- mental Roads.	Total, All Funds.
	£	£	£	£
<i>Income.</i>				
Motor Taxes, Fees, etc.* ...	389,659*	1,408,275*	...	1,797,934*
Contributions by Councils ...	238,958	8,753	...	247,711
State Appropriations—				
From Revenue ...	...	...	...	...
From Loans ...	21,115	119,407	134,152	274,674
Federal Grants ...	173,646	565,894	...	739,540
Miscellaneous ...	20,501	116,833	25	137,359
Transfer to Developmental Roads Fund ...	...	†67,500	†67,500	...
Total ...	£ 843,879	2,151,662	201,677	3,197,218
<i>Expenditure.</i>				
Construction ...	281,175	648,799	172,245	1,102,219
Maintenance ...	246,254	1,122,135	186	1,368,575
Loans—				
Repayment and Sinking Fund ...	157,577	44,414	2,191	204,182
Interest ...	82,008	92,662	15,460	190,130
Exchange and Manage- ment ...	8,188	14,382	2,487	25,057
Administrative Expenses ...	16,117	59,075	5,751	80,943
Miscellaneous ...	498	345	...	843
Total ...	£ 791,817	1,981,812	198,320	2,971,949

\* Receipts for 13 months. † Transfer from Country Main Roads Fund to Developmental Roads Fund

The expenditure on construction from the Cumberland and Country Main Roads Funds in 1935-36 amounted to £929,974, of which £472,695 was expended on State highways, £353,394 on trunk and ordinary main roads, and £103,885 on surveys, supervision and other unallocated expenses. In respect of maintenance, £647,196 was spent on State highways, £534,625 on trunk and ordinary main roads, £52,808 on Western Division roads, £41,553 on bridges, £38,304 on ferries, and £53,903 on unallocated expenses.

The expenditure of the respective funds during the year 1936-37 was £798,142, £2,487,245 and £101,303. An analysis of the income and expenditure of the combined funds is shown on page 913.

The income and expenditure of the Main Roads Department in each year since its establishment are shown in the following table. The operations of the Federal Aid Roads Funds have been allocated in the table to the existing funds of the Department according to the classes of roads on which the resources of the fund were expended. The Federal Aid Roads Fund was created in 1927-28 and until closed in 1933-34 expended £3,837,075

on road construction and interest on and repayment of loans; viz., in the County of Cumberland £620,884, on country main roads £2,924,434 and on developmental roads £291,757.

Year.	Cumberland Main Roads.	Country Main Roads.	Developmental Roads.	Total all Roads.
<i>Income.</i>	£	£	£	£
1925-26* ... ..	1,121,275	1,990,095	264,003	3,375,373
1926-27 ... ..	716,825	850,998	276,000	1,843,823
1927-28 ... ..	1,607,021	2,940,505	151,302	4,698,828
1928-29 ... ..	1,507,512	2,401,340	417,001	4,325,853
1929-30 ... ..	898,599	1,975,908	193,098	3,067,605
1930-31 ... ..	786,061	1,668,612	164,319	2,618,992
1931-32 ... ..	710,068	1,323,577	864	2,034,509
1932-33 ... ..	625,592	1,271,508	33,404	1,930,504
1933-34 ... ..	727,212	1,527,917	227,806	2,482,935
1934-35 ... ..	737,159	1,742,818	265,700	2,745,677
1935-36 ... ..	843,879	2,151,662	201,677	3,197,218
1936-37 ... ..	863,063	2,495,484	107,590	3,466,137
Total to 30-6-37 ...	11,144,266	22,340,424	2,302,764	35,787,454
<i>Expenditure.</i>				
1925-26* ... ..	685,290	776,084	101,468	1,562,842
1926-27 ... ..	969,723	1,524,087	152,007	2,645,817
1927-28 ... ..	1,195,859	1,914,603	195,304	3,305,766
1928-29 ... ..	1,215,440	2,348,796	377,443	3,941,679
1929-30 ... ..	1,415,911	2,746,660	362,813	4,525,384
1930-31 ... ..	863,657	1,769,865	216,816	2,850,338
1931-32 ... ..	608,914	1,055,337	41,663	1,705,914
1932-33 ... ..	655,132	1,598,875	58,868	2,312,875
1933-34 ... ..	721,684	1,790,105	161,859	2,673,648
1934-35 ... ..	908,894	1,951,517	328,446	3,188,857
1935-36 ... ..	791,817	1,981,812	198,320	2,971,949
1936-37 ... ..	798,142	2,487,245	101,303	3,386,690
Total to 30-6-37 ...	10,830,463	21,944,986	2,296,310	35,071,759

\* From 12th March, 1925, to 30th June, 1926.

The amount of funds, as represented by income, placed annually at the disposal of the Main Roads Department, has varied somewhat. The average annual amount during the first four years of the Department's operations was £3,560,969, included in which were receipts from loans £1,266,711 and State revenues £154,566. The amount then declined to £1,930,504 in 1932-33, due largely to the curtailment of loan funds, the cessation of grants from State revenues and the transfer during the year of £200,000 to the Consolidated Revenue Fund of the State. Moreover, a decline in the volume of motor traffic subsequent to 1929-30 resulted in diminished yield from motor taxation. Between 1932-33 and 1936-37 the amount increased by £1,535,633, towards which motor taxation contributed £853,351, Federal grant (petrol tax) £308,426 and receipts from loans £369,856.

The total expenditure from the various funds from 12th March, 1925, to 30th June, 1937, was £35,071,759. As, however, this amount includes £1,840,587 in respect of the repayment of loans which were expended on road works, the actual amount expended by the Department on the construction and maintenance of roads, and in meeting annual charges for interest exchange and administration was £33,231,172.

*Bridges and Ferries.*

Many of the earliest bridges erected in the State were built of stone, and some are still in existence. Those erected in the period following the extension of settlement to the interior were principally of timber, and have been replaced after an average life of about twenty-five years. Nearly all the large bridges of recent date are of iron and steel and reinforced concrete, and some of them have been erected under difficult engineering conditions, owing to the peculiarity of the river flow in certain parts of the country. The municipal and shire councils are empowered to control the bridges, with the exception of those under the control of the Main Roads Department. The most notable bridge-building project is the Sydney Harbour Bridge described below.

A wooden bridge across Middle Harbour at the Spit was built in 1924 by the Sydney Harbour Trust for the Manly Municipal Council. Tolls were levied to defray the cost until expenses had been paid in full, then the bridge was transferred to the Government in 1930. A bridge across George's River, constructed under similar conditions by the Sutherland Shire Council, was opened for traffic in May, 1929.

Where local conditions and limited traffic have not favoured the erection of a bridge, a punt or ferry has been installed. The most important ferries which are worked otherwise than by hand have been proclaimed as national services. The majority of ferries throughout the State are operated free of charge to the public. The most important exception is at Peat's Ferry, where Diesel powered vessels link up the Pacific Highway across the Hawkesbury River. At Taren Point, on the George's River, a toll charge was made on Saturdays, Sundays and public holidays until abolished in 1937.

*Sydney Harbour Bridge.*

The Sydney Harbour Bridge, crossing between Dawes Point on the southern and Milson's Point on the northern side, is the largest arch bridge in the world. Its total length, with railway and roadway approaches is  $2\frac{1}{2}$  miles. The railway across the bridge connects the City Railway at Wynyard Station and the northern suburban line at Waverton Station. The bridge was opened for traffic on 19th March, 1932. Its administration is vested in the Department of Main Roads.

The main bridge consists of a steel arch span of 1,650 feet, with a rise of 350 feet at the centre of the lower chord at crown, and the highest point of the top chord is 440 feet above mean sea level. It is flanked on either side by granite-faced concrete abutment towers and pylons and by five steel approach spans. The clearance for shipping is 170 feet from high-water level. The width of the deck overall is 160 feet; it carries a roadway 57 feet wide in the centre, with a pair of railway tracks on each side, and a footway 10 feet wide on each extreme outside. The main arch is composed of silicon steel and the deck of carbon steel. The weight of steelwork in the bridge is 50,800 tons, of which 37,000 tons are in the main span.

The total capital cost of the bridge to 30th June, 1936, was £10,082,944, but the final cost will probably approximate £9,500,000 after adjustment in respect of payments still outstanding and realisations from the sale of surplus resumed lands. The expenditure to 30th June, 1936, included £4,802,634 paid to the contractors in respect of the main bridge and steel approaches, £2,336,181 expended by the Public Works Department on the bridge and approaches, £1,352,964 on resumptions, £95,383 on Lavender Bay, railway station and minor works, and £1,495,782 interest and exchange capitalised.

It was prescribed by the Sydney Harbour Bridge Act, 1922, that two-thirds of the cost was to be debited to the Government railways, and that one-third was to be paid by means of a special levy at the rate of  $\frac{1}{3}$ d. in the £ of unimproved capital value of land in the following municipalities and shires, viz., Sydney, Manly, Mosman, Lane Cove, North Sydney, Willoughby, Ku-ring-gai, Warringah and part of Hornsby. Under amending legislation, however, it is provided that tolls be charged for traffic other than pedestrian, and that the railway and tramway authorities pay a prescribed amount in respect of each paying passenger carried across the bridge. The special levy upon the local areas was reduced to  $\frac{1}{3}$ d. in the £ in 1933 and to  $\frac{2}{3}$ d. in 1936. It is to cease at the end of the year 1939.

The charges payable in respect of vehicular traffic across the bridge (other than railway or tramway traffic) are shown below. The charges for vans and heavy vehicles were reduced in September 1934 and a charge of 1d. for children under fourteen years riding in vehicles was abolished.

	s.	d.
Motor cars and motor cycles with side cars ... .. each	0	6
Bicycles, tricycles, motor cycles without side cars, light vehicles propelled by hand or horse drawn ... .. "	0	3
Vans, lorries, drays, or other vehicles of which the tare weight does not exceed 2 tons ... .. "	0	9
Vans, lorries, drays, or other vehicles of which the tare weight exceeds 2 tons, but does not exceed 3 tons ... .. "	1	6
Vehicles over 3 tons tare weight ... .. "	2	0
Persons aged 14 years and over, riding in vehicles (other than the driver) ... .. "	0	3
Horse and rider ... .. "	0	3

One pair of railway tracks is used for trams. The tram fare for the bridge section was 4d. per adult passenger to 30th September, 1932, then it was reduced to 3d. The fare for children is 2d. Road tolls and contributions for railway and tramway passengers and by councils are paid into the Bridge account. The income and expenditure from 19th March, 1932, to 30th June, 1937 are shown below:—

Particulars.	19th Mar. to 30th June, 1933.	1933-34.	1934-35.	1935-36.	1936-37.	Total.
	£	£	£	£	£	£
<b>Income—</b>						
Road Tolls ... ..	197,226	174,449	189,461	215,873	234,283	1,011,292
Railway Contributions ... ..	64,677	75,000	104,457	107,320	113,838	465,292
Tramway " ... ..	55,577	50,000	51,543	53,971	54,607	265,698
Councils " ... ..	353,653	101,038	98,530	81,320	65,712	700,253
Other ... ..	5,026	5,575	4,188	7,035	9,165	30,989
<b>Total Income ...</b>	<b>£ 676,159</b>	<b>406,062</b>	<b>448,179</b>	<b>465,519</b>	<b>477,605</b>	<b>2,473,524</b>
<b>Expenditure—</b>						
Maintenance ... ..	11,617	23,833	24,442	44,385	33,235	137,512
Collection of Road Tolls ... ..	10,432	6,899	7,725	8,365	8,505	41,926
<b>Loan Charges—</b>						
Interest ... ..	440,503	350,567	369,105	324,777	286,504	1,771,456
Exchange ... ..	80,112	52,950	54,796	46,384	37,652	271,894
Management ... ..	4,858	4,876	2,390	5,761	2,916	20,801
Sinking Fund ... ..	34,141	31,626	35,461	34,027	35,492	170,747
Other ... ..	5,650	2,211	1,655	3,461	1,308	14,285
<b>Total Expenditure</b>	<b>£ 587,313</b>	<b>472,962</b>	<b>495,574</b>	<b>467,160</b>	<b>405,612</b>	<b>2,428,621</b>

*Government Expenditure on Roads, Bridges, etc.*

Although the State possesses an extensive railway system, the main roads are still the sole means of communication throughout a large part of the interior and serve as valuable feeders to the railways. The following return shows the expenditure including loan expenditure by the State Government and the Main Roads Department on works of a local character, such as roads, bridges, punts, ferries, public watering places, etc., in various years from 1906 to 1936:—

Year ended 30th June.	Expenditure from votes of Public Works Department.	Expenditure from Funds of Main Roads Department.	Endowments and Grants to Councils from votes of Local Government Department.			Total Expenditure, (exc. Sydney Harbour Bridge).	Sydney Harbour Bridge and Approaches.
			Shires.	Municipalities.	Total.		
	£	£	£	£	£	£	£
1906	497,061	...	...	4,944	4,944	502,005	...
1916	114,011	...	353,048	62,457	415,505	529,516	...
1921	212,407	...	316,180	108,353	424,533	636,940	...
1926	321,785	1,385,889	255,465	9,654	265,119	1,972,793	211,968
1928	361,023	3,097,224	246,790	17,124	263,914	3,722,161	1,024,388
1929	479,662	3,602,789	301,220	30,290	331,510	4,413,961	1,068,246
1930	464,271	4,093,621	312,178	69,129	381,307	4,939,199	1,350,618
1931	435,749	2,433,754	518,372	382,050	900,422	3,769,925	1,258,289
1932	161,903	1,321,949	201,388	21,283	222,671	1,706,523	1,127,775
1933	199,614	1,952,674	226,534	128,850	355,384	2,507,672	262,425
1934	266,001	2,148,855	831,144	1,190,972	2,022,116	4,456,972	27,182
1935	221,249	2,679,714	1,547,982	1,794,058	3,342,040	6,243,003	29,403
1936	43,949	2,470,794	1,508,138	2,099,028	3,607,166	6,121,909	44,385

\* Construction and Maintenance only.

The moneys expended by the Main Roads Department have not been provided wholly by the State Government, part of them being grants from the Government of the Commonwealth and contributions, etc., by the councils of the municipalities and shires. In addition to the expenditure shown in the table there has been a considerable amount of expenditure on roads, bridges, etc., by local government bodies and on streets by private individuals in preparing land for subdivisinal sales.

Grants to municipalities and shires by the Local Government Department in 1933-34, and later years include large amount distributed through the agency of councils as part of the Government's measures to provide for the relief of unemployment. The bulk of these grants was expended on the maintenance and improvement of roads and streets, but portion was used in improving parks, reserves, baths and beaches and in connection with other local services.

## RAILWAYS.

The railways open for traffic at 30th June, 1937, included 6,124 miles of line vested in the Railway Commissioner of New South Wales; a line 5 miles long running from Liverpool to Holdsworthy which is owned by the Federal Government; 203 miles of border railways in the Riverina district owned by the State of Victoria and 121 miles of private railways available for general traffic. The total length of the routes covered by these railways was 6,453 miles. The length of State railways laid with one or more tracks is shown on page 922.

### STATE RAILWAYS.

Changes in the administrative arrangements for the control of the State railways, are described on page 906. Administrative authority is vested now in a Commissioner for Railways, appointed for seven years, and there is an Assistant Commissioner to exercise such powers and charged with such duties as the Commissioner may determine;

The railway property is vested in the Railway Commissioner as a body corporate to conduct the services on existing lines and to construct the new lines authorised by the Legislature. By-laws for the regulation of the services, including those by which rates of freight and fares are prescribed, must be approved by the Government before they become operative.

Up to 30th June, 1928, railway receipts were paid into consolidated revenue, and moneys to be expended on the services as well as funds for construction were appropriated annually by Parliament. This procedure was altered as from 1st July, 1928, when the railway accounts were separated from the Consolidated Revenue Fund in terms of the Government Railways Amendment Act, 1928, which provides that the receipts, loan moneys appropriated by Parliament for railway purposes, and fines and penalties recovered by the Commissioner be paid into the Government Railways Fund.

Provision has been made for the establishment of a renewals fund to meet Parliamentary appropriations for renewals, reconstruction and conversion of lines, buildings and other wasting assets. These provisions are to commence on a date to be proclaimed, and after proclamation the Commissioner will be required to transfer from revenue to the renewals fund an amount determined annually by the Governor after investigation by a Committee of Review. The renewals fund will receive also any additional amounts appropriated by Parliament. The net profit in any year, as certified by the Auditor-General, is transferable to a reserve account to be available only to meet losses incurred in any year, and for the reduction of rates and fares.

The Committee of Review consists of the Auditor-General, the Commissioner for Railways, and the Under Secretary to the Treasury. Two additional members may be appointed by the Governor. The Committee will determine the capital debt of the railways as at 30th June, 1928; but pending such determination the amount has been tentatively certified by the Auditor-General.

Interest and other charges in connection with the debt, including exchange and management expenses, are chargeable to railway revenues, which were required also under the Act of 1928 to contribute to sinking funds for the repayment of the capital debt. In 1930, however, the sinking fund charge was suspended to a date to be proclaimed, and the amount debited in respect of the year 1928-29 at the rate of 5s. per cent. of capital debt was remitted by the Treasury.

The Railways Fund shares proportionately in the benefits and obligations of the State under the financial agreement between the Commonwealth and the States, which is described in the chapter of this volume entitled "Public Finance," as if the fund had not been separated from the Consolidated Revenue Fund.

Provision was made in the amending Act of 1928 for annual contributions from State revenues to make good two-thirds of the loss incurred on country developmental railways, the amount of contribution not to exceed £800,000 in any year. The maximum amount of £800,000 was paid in 1928-29 and each succeeding year.

Proposals for the construction of new railway lines are submitted in the Legislative Assembly by the Minister for Transport and are investigated by the Parliamentary Standing Committee on Public Works, consisting of members of both Houses of Parliament. If the Assembly passes a resolution in favour of a proposal, a bill is introduced to sanction its construction. The order of construction and the rate of progress of railway lines and works are determined by the Commissioner, and interest on lines under construction may be added to the capital cost.

The finances of the railways and tramways, as Government business undertakings, and their relation to the revenue, expenditure, and public debt of the State, are discussed in the chapter of this volume entitled "Public Finance."

#### LENGTH OF STATE RAILWAYS.

The statistics of State railways shown in this chapter refer to the lines vested in the Railway Commissioner of New South Wales, including the Campbelltown to Camden and Yass tramways, which are operated in conjunction with the railways.

The first railway line, 14 miles in length, was opened for traffic between Sydney and Parramatta on 26th September, 1855, and communication was established between Newcastle and East Maitland on 11th April, 1857.

The total length of the lines open at 30th June, 1937, was 6,124 miles, distributed as follows:—Southern system, 2,163 miles; Western, 2,215 miles; and Northern, 1,746 miles; in addition there were 1,250 miles of sidings and crossovers.

The growth of the State railway system is illustrated in the following table:—

Period.*	Lines opened for traffic during the period.	Lines open for traffic at end of period.			Capital expenditure on lines open for traffic—	
		Total length.	Population per mile.	Area per mile.	During the period.	Total at end of period.
	Miles.	Miles.	No.	Sq. miles.	£	£
1855-64 ...	143	143	2,789	2,170	2,631,790	2,631,790
1865-74 ...	260	403	1,427	770	4,212,756	6,844,546
1875-84 ...	1,215	1,618	559	192	13,235,592	20,080,138
1885-94 ...	883	2,501	490	124	15,775,133	35,855,271
1895-1904 ...	780	3,281	435	95	6,433,246	42,288,517
1905-14 ...	686	3,967	472	78	18,976,352	61,264,869
1915-24 ...	1,556	5,523	406	56	32,090,298	93,355,167
1925-34 ...	641	6,164	425	50	47,578,154	140,933,321
1935 ...	...	6,164	429	50	793,591	141,726,912
1936 ...	†	6,124	435	50	2,116,160	143,843,072
1937 ...	...	6,124	440	50	1,414,210	145,257,282

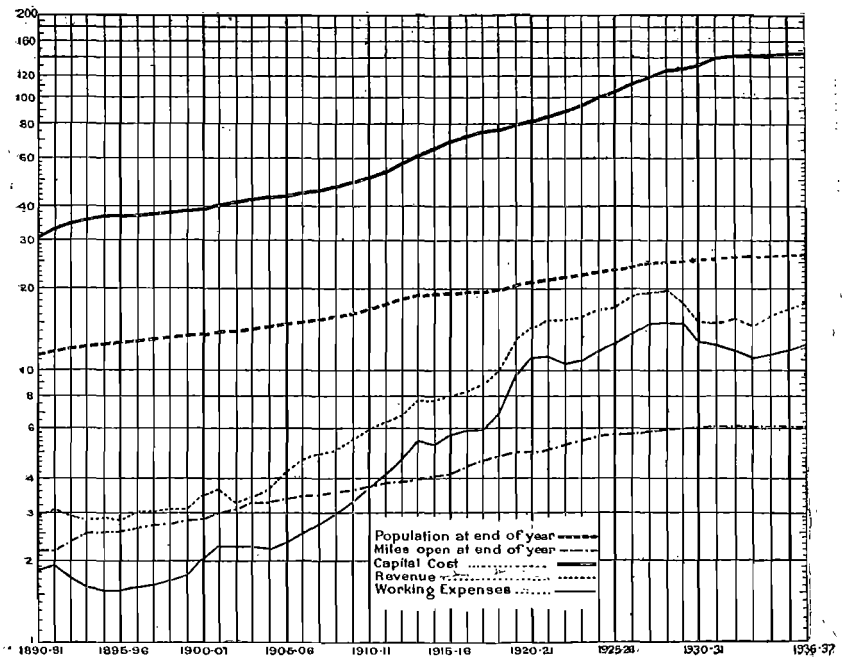
\* Calendar years to end of 1887, later years ended 30th June. † 40 miles of track dismantled.

Rail transport facilities have been extended not only by the construction of new railways but also by the laying of additional tracks on existing lines and by facilities for speedier transport such as electrification, to which much of the capital expenditure in recent years has been applied.

The mileage of lines open for traffic has been stationary since 1932-33, in which year 39 miles of new track were opened. Increases of capital expended have since been devoted largely to the improvement and reconditioning of existing equipment. Plans for the resumption of construction work were formulated early in 1936, and work has commenced on two new lines. One line from Sutherland, situated on the Illawarra line 15½ miles south of Sydney, to Cronulla, on the coast, will be approximately 6 miles in length, and the other from Maryvale, on the western line, to Sandy Hollow, on a branch of the northern line, approximately 150 miles. When completed, the latter line will connect the western, north-western, northern and coastal systems, and bring the north-western portion of the State into direct communication by rail with the port of Newcastle. Work is proceeding also on the uncompleted portion of the City Railway, between Wynyard and St. James stations.

#### RAILWAYS, 1890-91 TO 1936-37.

(Ratio Graph)



The numbers at the side of the graph represent £1,000,000 of capital cost, revenue and working expenses, 100,000 of population and 1,000 miles of railway.

The diagram is a ratio graph. The vertical scale is logarithmic and the curves rise and fall according to the rate of increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

The following statement shows the length of line laid with one or more tracks at intervals since 30th June, 1901:—

At 30th June.	Single.	Double.	Triple.	Quadruple.	Sextuple.	Total.
	miles.	miles.	miles.	miles.	miles.	miles.
1901	2,678	158½	...	8½	...	2,845
1911	3,476½	276	...	8½	...	3,761
1921	4,423	572	7½	34½	1*	5,043
1926	5,083	606½	9½	42	1*	5,742
1931	5,381	612	8	35	8†	6,044
1933	5,495	617	8	36	8†	6,164
1934	5,495	617	8	35	8†	6,164
1935	5,495	617	8	36	8†	6,164
1936	5,455	617	8	36	8†	6,124
1937	5,455	617	8	36	8†	6,124

\*Five tracks. †Includes 47 chains with eight tracks.

There are duplicate lines on the main Western line as far as Kelso and on two other sections between Kelso and Orange; the Southern line is duplicated as far as Cootamundra, the Northern line as far as Brantston, and the South Coast line to Wollongong, except certain tunnels and bridges.

#### *City and Suburban Electric Railways.*

The city electric railway when complete will form a two-track loop railway around the city, running, for the most part underground, along the eastern side of the city to Circular Quay and returning along the western side to the Central Station. The scheme includes the construction of a branch from the city railway to Bondi for the eastern suburbs, and a branch from the main suburban line to Balmain to serve the western suburbs.

The eastern section of the city railway was completed as far as St. James Station, about a mile from Central Station, in December, 1926, and the western section was opened for traffic between Central and Wynyard Stations—approximately 1½ miles—in February, 1932. The section to St. James is used as an extension of the South Coast or Illawarra railway to bring passengers from the suburbs situated south of Sydney on the western shore of Botany Bay. This line has two branches, one from Sydenham to Bankstown, and the other from Tempe to East Hills, and a line from Bankstown connects with the main Southern railway at Regent's Park, 2 miles from Lidcombe.

When the western section to Wynyard was opened for traffic, suburban services along the main Western, Southern and Northern lines were extended into the city, and they were connected with the North Sydney line by the opening of the Sydney Harbour Bridge in March, 1932.

The main trunk line, on which a large proportion of the suburban traffic is carried, runs in a westerly direction from Sydney through Granville and Parramatta. The main Southern system branches from the Western line at Lidcombe (10 miles from Central Station), and another branch runs southward from Granville (13 miles from Central Station) joining the line

from Lidcombe at Cabramatta. The Northern system branches from the main trunk line at Strathfield (7 miles from Central Station), and the North Shore line runs from Hornsby on the northern railway through the suburbs on the northern side of the Harbour across the Harbour Bridge to Wynyard Station.

The suburban railways are for the most part operated by electricity; the total length of the lines under the electric system at 30th June, 1937, was 94 miles, as shown below:—

Line.	Length of Route.		Line.	Length of Route.	
	miles	chs.		miles	chs.
City Railway ... ..	2	45	Southern—		
Illawarra—			Lidcombe to Cabramatta...	7	7
Sydney to National Park...	17	57	Granville to Liverpool ...	9	15
Sydenham to Bankstown...	8	33	Warwick Farm Racecourse	1	1
Tempe to Kingsgrove ...	3	43	North Shore Line ... ..	14	38
Western—					
Sydney to Parramatta ...	14	60			
Clyde-Rosehill Racecourse	1	16			
Northern—					
Strathfield to Hornsby ...	14	13			
North Strathfield Triangle	0	44	Total ... ..	94	52

Nearly all these lines are laid with at least two tracks, 21 miles being laid with four tracks or more.

#### COST OF STATE RAILWAYS.

The total capital expenditure on lines open for traffic as at 30th June, 1937, amounted to £145,257,282, excluding the cost of the line  $2\frac{1}{2}$  miles in length, from Wynyard across the Sydney Harbour Bridge to Waverton. The cost of construction was £100,852,910, and the expenditure on rolling stock and other equipment was £44,404,372, viz.: Rolling Stock, £26,635,761; electric power stations, substations and plant, £8,327,211; machinery, £2,248,456; workshops, £2,709,708; reconditioning of track, £2,598,200; furniture, £10,036; and floating capital for the purchase of stores, £1,875,000.

The average cost of the railways per mile open for traffic at 30th June, 1937, was £16,474 for construction and £23,728 for construction, rolling stock and other equipment. The cost of construction varies greatly according to the class of traffic for which the lines are constructed and the number of tracks laid, also by reason of the different physical characteristics of the wide expanse of territory through which they run.

The track on main trunk lines was originally laid with 80 lb. rails, on branch lines with  $71\frac{1}{2}$  lb. and 60 lb. rails, and on lines in the electrified area with 100 lb. rails. As renewals are required, however, 107 lb. rails are being laid in the electrified area, on heavy passenger lines, and on the main trunk lines, 90 lb. rails on secondary lines, and 80 lb. recovered rails on unballasted branch lines. Sleepers of Australian hardwood, measuring 8 ft. x 9 in. x  $4\frac{1}{2}$  in., are being laid at the rate of 20 per 45 ft. of 90 lb. and 107 lb. rail, and per 40 ft. of 80 lb. rail.

Of £145,257,282 expended to 30th June, 1937, an amount of £666,864 was provided from consolidated revenue, and £2,598,200 represented the outstanding balance of an advance made by the Treasury for the purpose of improving railway tracks and rolling stock. Both amounts are free of interest, but the latter is repayable in annual instalments over a period of twenty years, commencing in 1935-36. The amount advanced during the

three years ended 30th June, 1937, totalled £2,742,000, while repayments were £143,800. Interest on the balance of the capital debt is chargeable at the average rate payable on the public debt of the State, as shown on page 90 of the chapter of this Year Book relating to public finance, the rate in 1936-37 being 3.70787 per cent.

The capital expenditure on railways open for traffic, the interest charges and net earnings in various years since 1901 are shown below:—

Year ended June.	Capital Expended on lines open.	Interest, Exchange and Loan Expenses.*			Net Earnings.	Annual Contribution from Consolidated Revenue.	Deficit.
		Interest.	Exchange, etc.	Total.			
	£000.	£000.	£000.	£000.	£000.	£000.	£000.
1901 ... ..	38,933	1,425	...	1,425	1,456	...	31†
1911 ... ..	50,972	1,797	...	1,797	2,351	...	554†
1916 ... ..	68,826	2,569	...	2,569	2,345	...	224
1921 ... ..	82,304	3,812	...	3,812	3,235	...	577
1926 ... ..	105,238	5,250	...	5,250	4,419	...	831
1929 ... ..	124,329	6,150	...	6,150	4,638	800	712
1930 ... ..	126,318	6,421	...	6,421	2,864	800	2,757
1931 ... ..	132,565	6,790	795	7,585	2,363	800	4,422
1932 ... ..	139,667	6,519	1,337	7,856	2,491	800	4,565
1933 ... ..	140,797	6,353	1,246	7,599	3,439	800	3,360
1934 ... ..	140,933	5,972	1,103	7,075	3,687	800	2,588
1935 ... ..	141,727	5,678	843	6,521	4,437	800	1,284
1936 ... ..	143,843	5,700	904	6,604	5,106	800	698
1937 ... ..	145,257	5,444	789	6,233	5,461	800	28†

† Surplus.

\* Sinking Fund for debt redemption is not charged.

State railways are regarded as a developmental agency in the settlement of the country rather than as a revenue-producing enterprise, and because of this services on a number of lines are conducted at a loss. In addition, railway finances bear the burden of substantial concessions made for the direct benefit of primary and secondary industries. These include rebates from ordinary charges for the transport of livestock and fodder, and concessions in respect of the carriage of raw materials and the products of certain manufacturing industries which are assisted for national reasons.

Despite these handicaps to railway finances, the net earnings in the earlier years of the period under review usually exceeded interest by a substantial amount. Subsequently operating expenses rose and interest charges increased with the rapid extension of capital equipment and a rise in the level of interest rates. During the period 1914-15 to 1921-22 earnings were insufficient to pay interest charges, and deficiencies of revenue ranging between £23,331 in 1914-15 and £577,032 in 1920-21 averaged £213,650 yearly. Small surpluses were earned in the three years 1922-23 to 1924-25, but thereafter deficiencies occurred on an increasing scale. The deficiency amounted to £1,609,267 in 1927-28 and its reduction to £712,434 in 1928-29 was due to the payment by the Government for the first time of a contribution, since paid annually, of £800,000 towards losses incurred on developmental country lines. Revenue declined seriously after 1928-29, but there was no offsetting movement in working expenses until 1930-31, in which year an additional heavy charge was assumed in respect of exchange on interest remitted overseas. Progressive recovery in financial results from

1931-32 was due mainly, in the first place, to reductions in working expenses, interest and exchange, and in 1934-35, and subsequently, to increased earnings, coupled with further savings in interest and exchange.

#### EARNINGS AND EXPENSES.

As the carriage of goods and livestock constitutes the principal source of railway revenue, the earnings in each year are affected by the seasons experienced in the agricultural and pastoral districts. In unfavourable seasons the carriage of fodder and the transfer of live stock at reduced rates cause a diminution in the earnings, and at the same time an increase in the working expenses. The extension of the lines into sparsely settled districts also causes an increase in the proportion of working expenses to total earnings, as many of these lines do not earn the cost of maintenance. A statement of earnings and working expenses at intervals since 1901 appears hereunder:—

Year.	Gross Earnings.	Working Expenses.		Net Earnings.	
		Amount.	Proportion to Gross Earnings.	Amount.	Per cent. on Capital.
	£	£	per cent.	£	per cent.
1901	3,573,779	2,118,201	59.3	1,455,578	3.78
1911	6,042,205	3,691,061	61.1	2,351,144	4.67
1916	8,006,078	5,061,168	70.7	2,344,910	3.45
1921	14,267,205	11,032,677	77.3	3,234,528	4.01
1926	16,939,032	12,519,993	73.9	4,419,039	4.30
1929	19,615,616	14,978,050	76.4	4,637,566	3.82
1930	17,826,692	14,962,423	83.9	2,864,269	2.28
1931	15,205,741	12,842,333	84.5	2,363,408	1.80
1932	15,001,022	12,510,029	83.4	2,490,993	1.85
1933	15,405,320	11,966,648	77.7	3,438,672	2.45
1934	14,890,186	11,203,520	75.2	3,686,666	2.62
1935	16,002,699	11,565,658	72.3	4,437,041	3.14
1936	16,953,581	11,848,070	69.9	5,105,511	3.58
1937	17,816,496	12,355,322	69.4	5,461,174	3.78

The ratio of working expenses to gross earnings in 1930-31 was the highest yet recorded. Earnings were low in 1929-30 by reason of the small wheat harvest, dislocation in the coal-mining industry, and adverse economic conditions, the intensification of which resulted in further general decline of receipts. The progressive lowering of the ratio was due to a decline in working expenses until 1933-34, and thereafter to increased earnings in excess of the larger working expenses entailed in coping with a greater volume of traffic. The ratio of 69.4 per cent. in 1936-37 was lower than the ratio in any year since 1918-19.

The following table shows the gross earnings, working expenses, and net earnings per train mile and per average mile open at intervals since 1901:—

Year ended 30th June.	Per Train Mile.			Per Average Mile Open.		
	Gross Earnings.	Working Expenses.	Net Earnings.	Gross Earnings.	Working Expenses.	Net Earnings.
	d.	d.	d.	£	£	£
1901	79·68	47·23	32·45	1,268	751	517
1911	85·27	52·09	33·18	1,627	994	633
1921	150·23	116·17	34·06	2,843	2,198	645
1926	165·09	122·02	43·07	2,960	2,188	772
1929	171·93	131·28	40·65	3,323	2,537	786
1930	160·16	134·42	25·74	2,992	2,511	481
1931	143·15	120·90	22·25	2,529	2,136	393
1932	139·28	116·15	23·13	2,480	2,068	412
1933	144·64	112·35	32·29	2,501	1,943	558
1934	141·96	106·81	35·15	2,416	1,818	598
1935	146·17	105·64	40·53	2,596	1,876	720
1936	146·88	102·65	44·23	2,768	1,934	834
1937	140·79	103·87	45·92	2,909	2,017	892

#### NON-PAYING LINES.

Many of the railways of New South Wales have been constructed with the view to promoting settlement and developing the natural resources of the State rather than of meeting requirements already existing, and traffic over a number of lines is conducted at a loss. Even on portions of the main lines the earnings do not cover working expenses and interest on the capital cost, and most of the branch lines of comparatively recent construction are unprofitable.

Particulars relating to a number of lines are shown below, mainly for the year ended 31st December, 1936, together with aggregate figures for the preceding year:—

Lines.	Length.	Capital Cost.	Interest and Exchange.	Working Expenses.	Earnings.	Loss after providing for Working Expenses, Interest, etc.
Northern—						
Main Line—Tamworth to Wallangarra .. .. .	miles 210	£ 3,216,368	£ 140,290	£ 208,750	£ 221,425	£ 127,615
Branch lines .. .. .	540	3,213,731	140,174	206,160	190,400	149,934
Total Northern .. ..	750	6,430,099	280,464	414,910	417,825	277,549
North Coast and Branches .. ..	504	13,087,915	566,288	1,033,328	1,075,301	524,315
Southern—Branch lines .. ..	1,444	11,765,974	613,203	573,286	605,525	480,904
South Coast—Kiama to Nowra ..	23	496,212	19,027	26,876	23,446	22,457
Western—						
Main Line—Nyngan to Bourke ..	127	807,563	35,224	57,251	53,871	36,604
Branch lines .. .. .	1,263	8,956,947	390,979	630,513	628,176	393,016
Total Western .. ..	1,395	9,764,510	425,903	687,764	683,047	431,620
Suburban* .. .. .	34	1,204,090	52,510	111,045	63,450	100,714
Total Specified Lines 1936 ..	4,219	42,688,800	1,857,404	2,847,809	2,867,594	1,837,619
" " " 1935 ..	4,259	42,090,943	1,879,405	2,778,260	2,730,005	1,927,660

\* Includes Fassfern to Toronto line previously classified with Northern Branch Lines, also Westmead to Rogan's Hill and Blacktown to Richmond lines, previously with Western branch lines.

Similar data in calendar years are not available for all lines; but the foregoing figures indicate that the greater part of the loss on railways in recent years was incurred in respect of lines on which about 30 per cent. of the capital cost was expended.

## DISTRIBUTION OF EARNINGS AND EXPENSES.

A statement of the various items of earnings and working expenses of all lines during 1928-29 and four subsequent years is shown below:—

Particulars.	1928-29.	1931-32.	1934-35.	1935-36.	1936-37.
<i>Earnings.</i>	£	£	£	£	£
Passengers ... ..	7,238,329	4,943,790	5,153,196	5,433,176	5,622,929
Mails, parcels, horses, etc. ...	886,387	662,640	714,624	753,486	771,683
Total Coaching	£ 8,124,716	5,606,430	5,867,820	6,186,662	6,394,612
Refreshment-rooms ...	£ 745,070	502,484	529,202	555,482	609,730
Goods—					
Merchandise ... ..	6,196,543	4,533,059	5,223,121	5,732,147	6,049,876
Wool ... ..	804,064	849,641	679,748	642,493	695,783
Livestock ... ..	1,315,552	1,250,462	1,041,035	1,055,511	1,187,463
Minerals ... ..	2,063,033	1,220,153	1,638,708	1,724,770	1,727,645
Total Goods	£ 10,379,192	7,853,315	8,582,612	9,154,921	9,660,767
Rents ... ..	221,088	168,937	165,809	169,807	179,364
Sale of electrical energy ...	145,550	737,929	704,308	749,361	802,070
Miscellaneous ... ..		131,927	152,948	137,348	169,953
Total Earnings	£ 19,615,616	15,001,022	16,002,699	16,953,581	17,816,496
<i>Working Expenses.</i>					
Maintenance of way and works	2,538,981	2,346,791	2,432,517	2,161,368	2,319,717
Rolling Stock—					
Maintenance ... ..	3,448,215	2,848,143	2,593,028	2,697,567	2,741,195
Motive power—					
Coal, etc. ... ..	1,151,235	689,610	511,232	545,659	576,764
Other ... ..	2,203,501	1,563,938	1,326,814	1,444,695	1,498,523
Other rolling stock ...	200,513	178,939	142,381	155,065	165,304
Transportation and traffic ...	3,848,525	3,059,815	2,726,197	2,925,093	3,005,729
Electrical ... ..	292,176	694,418	590,618	612,900	636,585
General charges and stores ...	506,093	433,489	414,447	450,255	504,281
Refreshment-rooms ... ..	728,811	523,886	517,424	544,168	594,924
Contribution to Superannuation Fund ... ..	60,000	171,000	311,000	311,300	312,300
Total Working Expenses ...	£ 14,978,050	12,510,029	11,565,658	11,848,070	12,355,322
Net Earnings ... ..	£ 4,637,566	2,490,993	4,437,041	5,105,511	5,461,174

Earnings in 1928-29 were higher than in any previous year. They declined thereafter and, excluding sales of electricity, an item which first appeared in 1929-30, were lower in 1931-32 by 27.2 per cent. The decline in coaching receipts was 31 per cent., and in goods earnings 24.3 per cent. There was a small increase in 1932-33, but this was more than offset in 1933-34 when further decline resulted from the reduction of fares and freight rates. Substantial increases then occurred, with the consequence that earnings in 1936-37 were 18.8 per cent. higher than in 1931-32, the increase from coaching being 14.1 per cent. and from goods traffic 23.0 per cent.

During 1936-37 the earnings derived from the carriage of passengers represented 31.6 per cent. of the total; mails, parcels, etc., 4.3 per cent.; goods, 54.2 per cent.; refreshment rooms, 3.4 per cent.; sales of electricity to tramways, etc., 4.5 per cent.; rent and miscellaneous items, 2.0 per cent. The expenditure on locomotive power represented 16.8 per cent. of the working expenses; transportation and traffic, 24.3 per cent.; maintenance of rolling stock, 22.2 per cent.; and maintenance of ways and works, 18.8 per cent.

### COACHING TRAFFIC.

Particulars of the passenger traffic—suburban and country—and the receipts therefrom are shown in the following statement. Suburban lines are those within 34 miles of Sydney or Newcastle. The figures relating to miles travelled in years prior to 1926 are not strictly comparable with those of later years, owing to an alteration in the method of estimating the mileage travelled by season ticket holders:—

Year ended June 30.	Passenger Train Mileage.	Number of Passenger Journeys.			Miles Travelled.			Amount Received from Passengers.
		Suburban.	Country.	Total.	Suburban.	Country.	Total.	
000 omitted.								
								£
1901 ...	4,927	26,042	3,219	29,261	164,638	*	*	1,143,430
1911 ...	8,094	54,103	6,817	60,920	367,729	538,488	906,217	2,074,860
1921 ...	11,301	110,256	10,479	120,735	799,586	821,271	1,620,857	5,736,256
1926 ...	14,038	119,825	10,901	130,726	912,757	762,334	1,675,091	6,311,690
1929 ...	16,738	140,158	10,958	151,116	1,045,854	774,847	1,820,701	7,238,329
1930 ...	16,952	137,548	10,345	147,893	1,018,192	712,881	1,731,073	6,610,951
1931 ...	16,496	119,016	7,796	126,812	867,733	546,328	1,414,061	5,172,359
1932 ...	17,148	120,864	7,495	128,359	860,811	505,953	1,366,764	4,943,790
1933 ...	16,382	124,987	7,880	132,867	899,257	522,848	1,422,105	5,025,484
1934 ...	16,326	133,805	8,715	142,520	966,650	576,881	1,543,531	4,869,235
1935 ...	16,926	150,548	9,664	160,212	1,095,558	649,517	1,745,075	5,153,196
1936 ...	17,448	161,061	10,082	171,143	1,193,929	670,439	1,864,368	5,433,176
1937 ...	17,837	166,591	11,246	177,837	1,250,336	702,551	1,952,887	5,622,929

\* Not available.

Passenger traffic increased very rapidly between 1901 and 1921. The increase was most marked on suburban lines, where it continued until 1928-29. On country lines passenger journeys were greatest in 1926-27, but the passenger mileage, which had been exceeded in the years 1919-20 to 1923-24, was slightly less than in 1927-28. With the advent of the depression the volume of traffic declined sharply after 1928-29; on suburban lines passenger journeys declined by 15 per cent. up to 1930-31 and mileage by 18 per cent. up to 1931-32, while the decline on country lines up to 1931-32 amounted to 31 per cent. and 34 per cent. respectively. Substantial and progressive increase occurred in subsequent years with the consequence that the figures recorded in 1928-29 were exceeded in 1934-35 in respect of suburban traffic and in 1936-37 in respect of passenger journeys on country lines.

Further analysis of the traffic figures indicates that the expansion between 1920-21 and 1928-29 occurred for the most part in second-class journeys on the suburban lines. First class traffic on suburban lines showed but little movement up to 1926-27, but the number of passenger journeys declined from 14,565,000 in that year to 13,232,000 in 1929-30, to 5,381,000 in 1933-34, and thence increased to 5,935,000 in 1936-7. A similar movement occurred in first-class journeys on country lines, on which the number declined from 2,742,000 in 1926-27 to 2,282,000 in 1929-30, to 1,395,000 in 1932-33, and increased to 1,587,000 in 1935-36 and then declined to 1,580,000 in 1936-37. Second-class suburban journeys declined from 125,858,000 in 1928-29 to 108,129,000 in 1930-31, but subsequently increased annually, and numbered 160,656,000 in 1936-37. Second-class journeys on country lines ranged from 8,054,000 in 1920-21 to 8,570,000 in 1927-28 and to 8,062,000 in 1929-30; they fell sharply to less than 6,100,000 in 1930-31 and 1931-32 but following successive increases numbered 9,667,000 in 1936-37.

In the aggregate, second-class passengers paid £4,424,061, or 79 per cent. of the total receipts from passengers in 1936-37, and first class passengers £1,198,868, or 21 per cent. Corresponding ratios in 1920-21 were 65 per cent., and 35 per cent.

Particulars are shown below regarding first and second class passenger traffic on suburban and country lines during the years ended June, 1929, and 1937:—

Particulars.	Year ended June, 1929.			Year ended June, 1937.		
	First Class.	Second Class.	Total.	First Class.	Second Class.	Total.
<i>Suburban Lines.</i>						
Journeys—						
Ordinary Passengers ... 000	3,852	40,950	53,802	1,170	72,902	74,081
Season Ticket Holders ... 000	10,448	40,852	51,300	4,756	54,030	58,786
Workmen's ... 000	...	35,056	35,056	...	33,724	33,724
Total Journeys ... 000	14,300	125,858	140,158	5,935	160,656	166,591
Miles Travelled ... 000	113,777	932,077	1,045,854	54,251	1,196,085	1,250,336
Average Mileage per Passenger	7.96	7.41	7.46	9.14	7.45	7.51
Amount Received from Passengers ... £	360,264	2,665,755	3,026,019	120,791	2,585,445	2,715,236
Average Receipts per Passenger per mile ... d.	0.76	0.69	0.69	0.57	0.52	0.52
<i>Country Lines.</i>						
Passengers ... 000	2,597	8,361	10,958	1,580	9,667	11,247
Miles travelled ... 000	267,785	507,002	774,847	175,473	527,078	702,551
Average Mileage per Passenger ...	103.10	60.65	70.71	111.09	54.52	62.47
Amount Received from Passengers ... £	1,808,149	2,344,161	4,212,310	1,060,077	1,838,616	2,907,693
Average Receipts per Passenger per mile ... d.	1.67	1.11	1.30	1.46	0.84	0.99

On suburban lines the average journey is approximately  $7\frac{1}{2}$  miles and the rate paid by passengers is 0.52d. per mile. On country lines the average journey in 1936-37 by first-class passengers was 111 miles, and by second-class  $54\frac{1}{2}$  miles, the rates per mile being 1.46d. and less than 0.84d., respectively. The journeys of second-class passengers represented 95 per cent. of the mileage in 1936-37 and a similar proportion of the receipts on suburban lines. The corresponding proportions on country lines were 75 per cent. of the mileage and 63 per cent. of the receipts.

Information relating to the density of passenger traffic on suburban and country lines from 1928 onwards is contained in the following table:—

Year ended 30th June.	Average Number of Passengers carried per Train Mile.	Average Mileage per Passenger Journey.	Average Receipts per Passenger Mile.	Average Fare per Passenger Journey.	Density of Traffic per Average Mile Worked.
<i>Suburban Lines.*</i>					
1928 ... ..	148	7.50	d. 0.66	d. 4.92	3,765,549
1929 ... ..	139	7.46	0.69	5.18	3,805,872
1930 ... ..	129	7.40	0.68	5.07	3,626,040
1931 ... ..	103	7.29	0.67	4.92	3,693,219
1932 ... ..	93	7.12	0.69	4.93	3,003,947
1933 ... ..	105	7.19	0.67	4.85	3,138,110
1934 ... ..	114	7.22	0.58	4.18	3,373,292
1935 ... ..	127	7.28	0.54	3.90	3,823,135
1936 ... ..	136	7.41	0.53	3.90	4,166,417
1937 ... ..	141	7.51	0.52	3.91	4,363,262
<i>Country Lines.*</i>					
1928 ... ..	86	69.62	1.28	89.42	136,597
1929 ... ..	84	70.71	1.30	92.26	133,385
1930 ... ..	79	68.91	1.25	85.98	121,520
1931 ... ..	68	70.08	1.20	84.13	92,270
1932 ... ..	64	67.50	1.17	78.83	85,008
1933 ... ..	67	66.35	1.15	76.15	86,269
1934 ... ..	74	66.19	1.06	69.85	95,103
1935 ... ..	78	67.21	1.00	67.28	107,078
1936 ... ..	77	66.50	1.01	67.01	111,254
1937 ... ..	78	62.47	0.99	62.05	116,582

\* Suburban lines are those within 34 miles of Sydney or Newcastle.

The density of suburban traffic declined by 21.1 per cent. between 1928-29 and 1931-32, but by reason of subsequent rapid increases was, in 1936-37, greater than in 1928-29 by 14.6 per cent. The increase after 1931-32 followed upon reductions in fares, and was greater in second-class traffic than in first-class, hence the average receipt per passenger mile declined materially.

The density of country traffic declined by 36 per cent. between 1928-29 and 1931-32, and in 1936-37 was nearly 13 per cent. lower than in the former year. With the exception of a slight increase in 1935-36, the receipts per passenger mile have been falling since 1928-29.

## GOODS TRAFFIC.

The following figures show the volume of the goods traffic in recent years, as compared with 1901 and 1911. The term "ton-mileage" used in the statement is the product of the load in tons, and the distance over which it is carried:—

Year ended 30th June.	Goods train mileage.	Goods and Live-stock Tonnage.	Ton mileage (000 omitted)*	Gross Earnings.
				£
1901	5,836,587	6,398,227	404,740	2,203,240
1911	8,913,171	10,355,565	810,949	3,585,424
1921	11,490,782	15,563,131	1,418,386	7,270,856
1926	10,587,285	15,032,811	1,509,555	8,941,123
1927	11,282,100	17,224,894	1,654,815	10,490,593
1929	10,644,549	14,516,643	1,690,560	10,379,192
1930	9,761,798	12,150,964	1,498,723	9,353,867
1931	8,997,391	10,743,109	1,425,184	7,841,406
1932	8,700,471	10,211,322	1,407,450	7,853,315
1933	9,179,998	11,147,866	1,550,327	8,169,056
1934	8,846,935	11,364,235	1,410,854	7,802,130
1935	9,349,228	13,018,620	1,522,781	8,582,612
1936	10,252,956	13,839,012	1,666,603	9,154,921
1937	10,710,525	14,684,885	1,731,904	9,660,767

\*Exclusive of coal on which only wayleave charges were collected.

Variations in the volume of goods traffic result naturally from changes in seasonal conditions, particularly as regards primary products. The tonnage in 1926-27 was the largest on record, and all classes of freight were at a high level. Declining coal trade contributed largely to the decrease of 2,708,251 tons up to 1928-29. With the onset of depression there was further material decline until 1931-32, in which year the total freight of 10,211,322 tons was the lowest since 1909-10. Minerals (other than coal, coke and shale) declined to less than one-third of their former volume, while general merchandise (other than grain and flour) represented slightly more than one-half of the tonnage in 1928-29. As a result of further diminution in its haulage the tonnage of coal was 4,498,158 tons in 1931-32 as compared with 8,289,937 tons in 1926-27 and 5,801,880 tons in 1928-29. There was, however, a substantial increase in the quantity of grain, flour, etc., while the carriage of wool and livestock was substantially maintained.

The recovery of goods traffic subsequent to 1931-32 accompanied improvement in economic conditions. The increase in the haulage of coal between 1931-32 and 1936-37 amounted to 2,749,760 tons, while general merchandise other than grain, etc., increased by 1,208,647 tons, and other minerals by 662,143 tons. The tonnage of grain, flour, etc., decreased after 1932-33.

The total tonnage in 1936-37 was slightly in excess of that in 1928-29. The chief movements in individual items of freight during these years were in coal, which was higher in 1936-37 by 1,446,038 tons, and other minerals and general merchandise, which were lower by 1,038,918 tons and 447,627 tons, respectively.

The next statement shows the classes of goods carried on the railways in various years since 1901:—

Year ended 30th June.	General Merchandise.		Wool.	Live Stock.	Minerals.		Total Goods.
	Grain, Flour, etc.	Other.			Coal, Coke, and Shale.	Other.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1901	504,880	1,267,742	99,104	200,339	3,956,033	370,129	6,398,227
1911	787,632	2,298,078	137,599	485,021	6,059,648	587,587	10,355,565
1921	1,216,834	3,375,443	93,760	732,804	8,881,796	1,262,494	15,563,131
1926	1,450,813	3,656,355	154,946	766,537	7,145,225	1,858,915	15,032,811
1927	1,523,519	3,971,798	189,605	810,515	8,289,937	2,439,520	17,224,894
1929	1,767,585	3,631,914	179,960	729,581	5,801,880	2,405,723	14,516,643
1930	1,211,030	3,245,505	170,884	783,599	4,761,633	1,977,913	12,150,964
1931	2,128,431	2,067,786	162,031	639,043	4,564,964	1,180,854	10,743,109
1932	2,233,809	1,975,640	186,610	612,443	4,498,153	704,662	10,211,322
1933	2,368,743	2,185,373	198,243	656,097	4,890,533	848,877	11,147,866
1934	1,730,792	2,409,176	174,795	721,096	5,286,596	1,041,780	11,364,235
1935	1,919,600	2,733,667	185,079	694,927	6,222,076	1,263,271	13,018,620
1936	1,986,624	2,903,406	176,181	799,698	6,703,697	1,269,406	13,839,012
1937	1,863,764	3,184,287	189,420	832,691	7,247,918	1,366,805	14,684,885

The gross earnings in respect of the various classes of goods carried during 1936-37 were as follows:—Coal, coke, and shale, £1,385,894; other minerals, £341,751; live stock, £1,187,463; grain and flour, £1,313,591; wool, £695,783; general merchandise, £4,736,285.

The following table contains information relating to the density of goods traffic.

Year ended 30th June—	Average Freight- paying Load carried per Train.	Average Miles per Ton.	Earnings per Ton-mile.*	Density of Traffic per Average Mile worked.
	tons.		d.	tons.
1911 ... ..	90.98	80.65	0.91	218,408
1921 ... ..	148.44	92.94	1.10	282,631
1926 ... ..	164.94	101.93	1.39	263,802
1929 ... ..	183.17	118.16	1.45	286,376
1930 ... ..	177.06	126.35	1.48	251,778
1931 ... ..	183.62	134.25	1.30	237,260
1932 ... ..	186.00	139.99	1.33	233,050
1933 ... ..	193.30	142.38	1.25	252,129
1934 ... ..	187.48	127.49	1.31	229,253
1935 ... ..	188.11	120.23	1.34	247,431
1936 ... ..	189.43	123.32	1.31	272,588
1937 ... ..	185.70	120.80	1.32	283,269

\* Exclusive of coal on which shunting charges only were collected.

The density of goods traffic and average earnings fluctuate to a greater extent than in passenger traffic, as they are affected by changes in the classes of freight carried as well as by changes in rates.

#### FARES AND FREIGHT CHARGES.

Passenger traffic is greatest within the Sydney and Newcastle suburban areas, and the fares charged within a 34 miles radius of either of the cities are lower than those for equal distances outside those areas. The following table shows the ordinary fares charged for single journeys at intervals since 1921, over stated distances from either Sydney or Newcastle. Cheap

return fares are available for journeys to tourist districts and holiday resorts and since November, 1933, concession rates have been extended to suburban travellers over the week-end period:—

*Single Tickets.*

Distance.	30th June, 1921.		30th June, 1926.		30th June, 1931.		30th June, 1937.	
	First-class.	Second-class.	First-class.	Second-class.	First-class.	Second-class.	First-class.	Second-class.
Miles.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1	0 3½	0 2	0 2	0 1½	0 2½	0 2	0 2	0 1
5	0 8	0 6	0 8	0 6	0 8½	0 6½	0 7	0 5
10	1 3	0 10½	1 2	0 10½	1 3	0 11	1 0	0 9
20	2 5	1 6	2 0	1 6	2 1	1 7	1 11	1 5
30	3 7	2 4	2 10	2 1½	3 0	2 3½	2 8	2 0
34	4 1	2 7½	3 2	2 4½	3 4	2 6½	3 0	2 3
50	7 7	5 0	6 8	4 9	6 10	4 11	6 0	4 4
100	18 7	12 2	17 7	12 0	17 9	12 2	15 5	10 10
200	40 7	25 7	37 7	25 4	37 9	25 6	33 1	22 11
300	62 2	38 3	56 5	37 11	56 7	38 1	49 2	34 2
400	83 7	49 10	73 8	49 5	73 10	49 7	64 7	44 9
500	100 8	57 10	86 4	57 10	86 6	58 0	75 9	52 3

Between July, 1917, and June, 1921, railway fares were increased by 66 per cent. During 1923-24 second-class fares were lowered slightly and first-class fares were reduced to an appreciable extent. In December, 1927, fares were raised again, the increases on second-class tickets ranging from 33 per cent. to 7 per cent. in the suburban area. A reduction of 10 per cent. was made in second-class fares, and a slightly greater reduction in first-class fares from 1st November, 1933.

Particulars relating to changes in the cost of monthly periodical tickets since 1921 are shown below:—

*Monthly Periodical Tickets.*

Distance.	30th June, 1921.		30th June, 1926.		30th June, 1931.		30th June, 1937.	
	First Class.	Second Class.	First Class.	Second Class.	First Class.	Second Class.	First Class.	Second Class.
Miles.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1	14 6	9 9	12 11	9 8	13 9	10 4	10 0	7 6
5	30 9	20 6	27 4	20 6	29 4	22 0	25 9	19 6
10	44 0	29 0	38 3	28 8	41 0	30 9	36 9	27 6
20	58 0	39 3	52 3	39 2	55 11	42 0	50 3	37 9
30	66 6	44 9	58 0	43 6	62 1	46 7	55 9	42 0
34	69 3	46 0	59 9	44 10	64 0	48 0	57 6	43 3
50	79 9	51 0	77 0	51 3	81 6	54 3	69 9	48 3
100	112 6	56 9	100 3	66 9	106 6	70 9	92 6	63 9
200	156 3	92 6	138 9	92 6	147 0	98 0	128 6	88 9
300	181 9	112 6	168 0	112 0	178 0	118 9	155 9	107 6
400	207 0	131 3	197 0	131 3	208 9	139 0	182 0	125 6
500	231 6	150 6	225 9	150 6	239 3	159 6	207 6	143 0

The fares quoted represent the maximum charges, but liberal concessions are made to students, youths, and females. During 1922 there were slight reductions in respect of second-class periodical tickets, and charges for first-class tickets over long distances were substantially reduced. Further reductions were made in 1924, in fares for distances up to 34 miles. At the beginning of January, 1928, the fares were raised by about 7 per cent. in the suburban area and by 6 per cent. over longer distances, and in November, 1933, a reduction of 10 per cent. was made.

Workmen's weekly tickets are issued in the suburban areas to enable persons to travel to and from their work. They are available for one journey each way on every week day, the forward journey being by certain trains only. The charges for these tickets were increased by about 30 per cent. in December, 1927, and the increased fares were in operation until reduced by 15 per cent. in October, 1932. The charges at various dates since June, 1911, were as follows:—

Distance.	Workmen's Weekly Tickets—Second Class.					
	June, 1911.	June, 1916.	June, 1921.	June, 1931.	Dec., 1932.	June, 1937.
Miles.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1	0 6	0 9	1 3	1 8	1 5	1 5
5	1 6	1 9	2 11	3 11	3 4	3 4
10	2 2	2 6	4 1	5 6	4 8	4 8
20	3 0	3 4	5 5	7 4	6 4	6 4
30	3 10	4 2	6 11	9 0	7 10	7 10
34	4 2	4 6	7 5	9 8	8 2	8 2

### Freight Charges.

The system adopted in fixing freights on merchandise and live stock is to charge the lowest scale of freight on commodities of low values and on those which are used to assist production. The charge per ton mile decreases as the distance hauled increases.

The following table gives the charges per ton for haulage of different classes of freight over distances of 100 and 500 miles at various dates since June, 1921:—

Class of Freight.	30th June, 1921.		30th June, 1926.		30th June, 1931.		30th June, 1937.	
	100 miles.	500 miles.	100 miles.	500 miles.	100 miles.	500 miles.	100 miles.	500 miles.
Ordinary Goods (per ton)—	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Highest Class Freight...	75 0	193 3	76 8	197 6	76 8	197 6	76 8	197 6
Lowest " " " " " "	6 6	15 0	6 9	12 4	6 9	12 4	6 9	12 4
Agricultural Produce ...	11 5	18 2	11 5	19 0	12 0	19 11	12 0	19 11
Butter " " " " " "	31 7	94 0	24 10	57 7	27 4	63 4	27 4	63 4
Beef, Mutton, Veal, etc. (frozen) " " " " " "	14 7	72 11	18 11	43 11	18 11	43 11	18 11	43 11
Wool—Greasy " " " " " "	37 11	104 4	41 8	109 5	41 8	109 5	33 9	88 8
" "—Scoured " " " " " "	44 3	113 10	45 10	115 8	45 10	115 8	33 9	88 8
Live Stock (per 4-wheeled truck)—	110 5	303 4	109 9	299 9	120 9	329 8	97 10	267 0
Minerals—Crude Ore—								
Not exceeding £20 per ton in value	6 5	22 6	6 5	22 5½	6 5	22 5½	6 5	17 11
Not exceeding £10 per ton in value			6 5	17 10½	6 5	17 10½		

The highest class freight includes expensive, bulky, or fragile articles, such as boots, drapery, drugs, groceries, furniture, liquors, glassware, cutlery, ironmongery, confectionery, and carpets; the lowest class applies to fertilisers.

The freight charges for a distance of 100 miles in 1921 were from 50 to 100 per cent. higher than in 1911. For a distance of 500 miles the increases have not been so great proportionately, and the charges for frozen meat have been reduced. Some of the rates were increased in November, 1926. Rates for wool and livestock were reduced by 10 per cent. in the latter part of 1932, and again in July, 1933.

## GRADIENTS.

In many cases the railways of New South Wales pass through mountainous country over the Great Dividing Range which separates the narrow coastal plain from the interior. Consequently steep gradients and sharp curves are features of many sections, including parts of the trunk lines where the traffic is heavy.

In the southern system, the railway station at Roslyn, near Crookwell, is situated at an altitude of 3,225 feet above sea level; and at Nimmitabel, on the Goulburn to Bombala railway, the height is 3,503 feet. In the western system a height of 3,503 feet is attained at Newnes Junction, on the Blue Mountains, and 3,623 feet at Oberon, the terminus of a branch line from Tarana. On the northern line Ben Lomond is 4,473 feet above sea level.

The following statement shows the number of miles on different gradients in June, 1937:—

Gradients.	Southern System.	Western System.	Northern System.	Total.
1 in	miles.	miles.	miles.	miles.
18 to 30	16½	4½	3½	24½
31 " 40	72	61	55½	188½
41 " 50	74½	53½	88	216
51 " 60	71½	80½	66½	218½
61 " 70	60½	69½	42½	172½
71 " 80	188½	142½	181½	512½
81 " 90	48½	58	52½	159
91 " 100	119½	179½	98	396½
101 " 150	256½	288½	177½	722
151 " 200	137½	124	98½	360½
201 " 250	72½	78½	50½	201½
251 " 300	102½	112	72½	286½
301 " level	942½	964	758½	2,665½
Total ...	2,162½	2,215½	1,745½	6,123½

The mileage in the table is exclusive of the line serving Wollongong harbour of 1 mile 8 chains.

## SIGNALLING AND SAFETY APPLIANCES.

In the matter of signalling and safety appliances the railways of New South Wales have progressed with modern invention. The points are interlocked on all the lines with the exception of a few in remote country districts where the traffic is light. The automatic signalling system is in operation on all the suburban lines under the electrical system.

Particulars regarding the various systems employed for the safe working of the lines in 1927 and 1937 are shown below:—

				1927.		1937.	
Single Track.				Mls.	Chs.	Mls.	Chs.
By automatic or track block system	...	...		82	16	3	36
electric train tablet	...	...	...	260	17	168	26
electric train staff	...	...	...	2,611	48	3,035	11
train staff and ticket	...	...	...	2,052	37	2,297	45
train staff and one engine only	...	...	...	76	15	16	16
				5,082	53	5,520	54
Double Track.							
By automatic or track block system	...	...		342	4	422	1
absolute manual block system	...	...	...	359	18	294	57
permissive manual block system	...	...	...	4	60	3	41
				706	2	720	19

A system of train control by telephone has been installed, so that the movements of trains may be controlled by officers located in a central office. Each controller is provided with special equipment for direct telephone communication with the stations, sidings and important connections in the section of the lines under his supervision.

The passenger and freight vehicles in use on the railways are fitted with automatic brakes.

#### ROLLING STOCK.

A classification of the rolling stock of the State railways is shown in the following table:—

Classification.	June, 1922.		June, 1932.		June, 1937.	
	No.	Capacity.	No.	Capacity.	No.	Capacity.
Locomotive—Steam ... ..	1,321	Tractive power. 000 lb. 32,349	1,432	Tractive power. 000 lb. 37,791	1,346	Tractive power. 000 lb. 36,668
Coaching—		Pas'gers.		Pas'gers.		Pas'gers.
Passenger ... ..	1,674	97,324	2,185	137,631	2,199	136,628
Motor Passenger ... ..	1	33	37	1,924	53	2,764
Sleeping and Special ... ..	97	2,338	122	2,699	121	2,586
Horse Boxes, Brake Vans, etc. ... ..	422	158	369	631	352	500
Total ... ..	2,194	99,853	2,713	142,885	2,725	142,478
Goods—		tons.		tons.		tons.
Open Waggon ... ..	16,498	262,693	17,329	284,662	16,833	268,984
Livestock Waggon ... ..	2,957	18,370	3,004	19,066	2,900	18,422
Louvred Vans ... ..	967	9,932	1,026	16,416	1,135	18,290
Refrigerator Vans ... ..	161	2,382	233	3,368	273	4,140
Brake Vans... ..	639	...	705	...	668	...
Other ... ..	251	3,250	65	775	65	924
Total ... ..	21,473	296,627	22,362	324,287	21,874	310,760
Service Stock ... ..	1,846	...	1,490	...	1,419	...

The average tractive power of the railway locomotives, as at 30th June, 1937, was 27,242 lb.; the average capacity of the passenger vehicles was 62 passengers, and of the goods stock 15 tons.

The expenditure incurred and charged to capital in respect of additions and improvements to rolling stock amounted to £459,066 in 1935-36 and £439,987 in 1936-37. Amounts charged to working expenses for renewals, replacements and repairs were £2,803,622 and £2,852,758 in the respective years.

#### RAIL MOTOR SERVICES.

Rail motors have been provided in a number of country districts where the population is not sufficient to warrant the provision of ordinary services. The first rail motor was put into operation in 1919 on the line between Grafton and Lismore, a distance of 87 miles. Modern motor trains are being equipped for the improvement and extension of these services.

## DIESEL-ENGINED TRAINS.

As Diesel engines have been successfully adapted to railway transportation in other parts of the world, arrangements have been made for their use in the railway system of New South Wales. Four Diesel trains are to be placed in commission on country lines, the first running between Parkes and Broken Hill, a distance of 400 miles, and the second between Dubbo and Bourke. A further innovation will be the use for these services of air-conditioned carriages.

## VICTORIAN GOVERNMENT RAILWAYS IN NEW SOUTH WALES.

In the southern portion of New South Wales the Government of Victoria has acquired certain railway interests by the purchase from a private company of a line between Deniliquin and Moama, and by agreement with the Government of New South Wales for the construction and maintenance of five border railways.

The agreement provides for railways on the 5 ft. 3 in. gauge, but the works within New South Wales are constructed suitably for conversion to the standard gauge, viz., 4 ft. 8½ in. When complete they are operated by the Victorian Railway Commissioners, but the fares and rates for the carriage of passengers, goods, and livestock thereon must not be less than the rates charged for similar mileage on the Victorian Railways. In the construction and working of the lines the same conditions and rates of wages as prevail in Victoria must be observed.

Two of the lines authorised under the agreement have been opened for traffic, viz., from Barnes, on the Moama line, to Balranald, and from Murrabit (Gonn Crossing) to Poonboon (Stony Crossing). Two are under construction, viz., from Euston to Lette, 30 miles, to serve en route the Benanee Settlement Area, and from Yarrawonga to Oaklands, 38 miles. Traffic is being conducted on part of the former line, and the latter is being operated by the constructing authority pending transfer to the Railway Commissioners. The fifth line, which has not yet been commenced, will cross the Murray at or near Golgol, New South Wales, and extend into this State for a distance not exceeding 20 miles.

The railway between Deniliquin and Moama, 44 miles on the 5 ft. 3 in. gauge, was constructed by a private company, and opened for traffic in 1876. It became part of the Victorian Railway system in December, 1923. A branch line to Balranald, 120 miles, was opened for traffic in March, 1926, and the line from Gonn Crossing to Stony Crossing, 38½ miles, on 16th March, 1928. The capital expended on these lines to the end of February, 1937, was £1,297,904. During the year ended February, 1937, the receipts amounted to £57,591, working expenses to £50,671, and interest to £56,723. The train mileage was 104,955, the number of passengers 14,704, and the goods traffic 111,100 tons.

## PRIVATE RAILWAY LINES.

The established policy in New South Wales has been to keep the railways under State control, and at the present time, with the exception of short lines connecting coal and other mines with the main railways, there are only 121 miles of private lines, on some of which provision has been made for the carriage of passengers and goods.

During the year 1888 a line of 3 ft. 6 in. gauge, and 35 miles 48 chains in length, was laid down from Silvertown and Broken Hill to the South Australian border. A short line connects the Government railway at Liverpool with the Warwick Farm Racecourse.

The Seaham Coal Company's line connects the West Wallsend and Seaham Collieries with Cockle Creek. The South Maitland system supplies the mining districts of East Greta, Stanford-Merthyr, and Cessnock. The Hexham-Minmi line runs between the collieries in the townships mentioned. The New Red Head line runs between Belmont and Adamstown. The line of the Commonwealth Oil Corporation extends from Newnes Junction, on the Western line, to the Wolgan Valley.

The following table shows the operations of the private railway lines open to the public for general traffic during the year ended June, 1937:—

Name of Private Railway.	Line.		Total Capital Expended.	Reserve Fund.	Train Miles run.	Passengers carried.	Goods carried.	Live Stock carried.
	Length.	Gauge						
	m.	ch ft. in.	£	No.	tons.	No.		
Silverton ... ..	36	58 3 6	559,168	154,677	82,429	31,611	635,744	74,001
Warwick Farm ... ..	1	14 8½	18,624	...	102	67,028	...	...
Seaham-West Wallsend	5	10 4 8½	16,000	...	1,046	...	110,465	...
South Maitland—								
East Greta, Stanford								
Merthyr, and Cess-								
nock ... ..	19	35 4 8½	†664,299	...	†201,659	†803,036	†55,831	...
Hexham-Minmi and								
Richmond Vale ...	16	04 8½	125,000	...	81,280	...	742,073	...
New Red Head ... ..	9	38 4 8½	190,424	...	89,242	263,268	1,028,050	...
Commonwealth Oil Cor-	33	04 8½	194,000	...	*	*	*	*
poration.								

\* No traffic. † Figures for 1935-36.

The Silverton Company has 20 locomotives and 683 goods vehicles, and passenger carriages are hired from the South Australian Government railways as required. The Seaham Colliery has 2 locomotives, and Government rolling stock is hired. On the South Maitland system there are 22 locomotives and 44 goods carriages, and passenger services are conducted by the State railways. The Hexham-Minmi Company has 1 locomotive 1 passenger carriage, and 9 goods carriages. The Warwick Farm and New Red Head lines are operated by the Government Railway Commissioner.

In addition to the private railway lines shown in the previous table, there are several lines connected principally with coal and other mines.

#### RAILWAY GAUGES OF AUSTRALIA.

Particulars of the gauges of the railways in each State as at 30th June, 1935, are shown below. The figures relate to Government lines and to private railways open for general traffic, classified according to the States in which they are located. Particulars of private lines used exclusively for special traffic are not included in the figures:—

State.	Miles at each Gauge open for traffic.						Total Miles.
	2ft.	2ft. 6in.	3ft.	3ft. 6in.	4ft. 8½in.	5ft. 3in.	
New South Wales ...	...	...	...	77	6,204	203	6,484
Victoria ... ..	...	122	11	...	...	4,410	4,543
Queensland ... ..	193	8	...	6,567	69	...	6,837
South Australia and							
Northern Territory	...	...	...	2,217	598	1,451	4,266
Western Australia ...	...	...	...	4,636	454	...	5,090
Tasmania ... ..	18	...	...	758	...	...	776
Total ... ..	211	130	11	14,255	7,325	6,064	27,996

The distances by rail between Sydney and the other capital cities are as follows:—Brisbane *via* North Coast line 611 miles, Brisbane *via* Wallangarra 715 miles, Melbourne 591 miles, Adelaide *via* Melbourne 1,074 miles, and Perth *via* Melbourne 2,761 miles. The journey from Sydney to Broken Hill *via* Melbourne and Adelaide is more than 1,400 miles, but a line across New South Wales opened for traffic in November, 1927, affords direct communication over a distance of 698½ miles.

The hampering influence of the diversity of gauges on interstate railway communication has given rise to discussion between the Commonwealth and State Governments, and to the investigation in 1921 by a Royal Commission of the subject of a uniform gauge to connect the capital cities of the mainland. It has been resolved that the adoption of a uniform gauge is essential to the development and defence of the Commonwealth, and that the gauge should be 4 ft. 8½ in., but agreement has not been reached in regard to any comprehensive scheme for giving effect to the resolutions. As an outcome of the negotiations, however, breaks of gauge have been eliminated at several points on lines running interstate, and at the same time considerable shortening of the route has been effected.

Prior to September, 1930, rail communication between Sydney and Brisbane passed through the border town of Wallangarra, where the 3 ft. 6 in. gauge of the Queensland railways met the 4 ft. 8½ in. gauge of the New South Wales system. In the month mentioned a line of uniform gauge—4 ft. 8½ in.—from Kyogle, on the North Coast railway in New South Wales, to Brisbane was opened for traffic. The journey between Sydney and Brisbane by the latter route is 104 miles shorter than the journey *via* Wallangarra. The cost of constructing the Kyogle-Brisbane line and of strengthening the line between Grafton and Kyogle, approximately £4,450,000, was shared by the Commonwealth and the States of New South Wales and Queensland.

An agreement entered into in 1925 by the Commonwealth and South Australian Governments provided for the extension of the Commonwealth 4 ft. 8½ in. line in South Australia from Port Augusta to Red Hill, and for the laying of a third rail on the existing 5 ft. 3 in. line between Red Hill and Adelaide. In 1935 the agreement was amended to provide for the extension of the Commonwealth line from Port Augusta only as far as Port Pirie, a distance of 56½ miles, and for the construction by the State Government of a 5 ft. 3 in. line 27½ miles in length from Red Hill to Port Pirie. With the opening of these lines in July, 1937, the journey between Adelaide and Port Augusta was shortened by 70 miles, and the break of gauge at Port Pirie replaced the breaks at Port Augusta and Terowie on the route formerly used. As compensation for its share in the cost of construction and the loss of revenue caused by the diversion of traffic, the State is to receive £20,000 annually from the Commonwealth for a period of twenty years.

In the journey from Brisbane, Queensland, to Perth, Western Australia, breaks of gauge now occur at Albury, on the border of New South Wales and Victoria; at Port Pirie, in South Australia; and at Kalgoorlie, where the Commonwealth and Western Australian lines connect.

#### TRAMWAYS.

The tramways of New South Wales, with the exception of one short line, are the property of the State Government. The metropolis and Newcastle are the only districts in which tramway services have been in operation since 1st January, 1927, when services in Maitland and Broken Hill were

abolished. The tramways were administered by the Railway Commissioners until 1930, when the tramway property—except the electric power stations—was vested in the Transport Trusts, and the services in Newcastle, as well as in Sydney, were placed under the administration of a Management Board constituted in terms of the Transport Act, 1930. The tramway employees were transferred to the service of the Metropolitan Transport Trust, and the staff required for the Newcastle services was made available by the Metropolitan Trust under agreement between the trusts. The administration of the tramways was transferred to the Board of Transport Commissioners in March, 1932, and to the Commissioner for Road Transport and Tramways in December, 1932, as described on page 906.

The gauge of the tramways is 4 feet 8½ inches, and all the services have been operated by electric power since 3rd July, 1937, when an electric trolley bus replaced the one remaining steam service between Kogarah and Sans Souci. Steam services in the Newcastle district were discontinued in November, 1930.

The total length of the tram and trolley bus route installations at 30th June, 1936, was 197 miles 30 chains, which comprised 195 miles 12 chains of tram lines and 2 miles 18 chains of trolley bus route. Of these distances, however, services have been discontinued on 8 miles 33 chains of tram line and on 9 chains of trolley bus route, hence the length of route actually used was 186 miles 59 chains in respect of trams and 2 miles 9 chains in respect of trolley buses. The distribution of the route and track mileages on which services were conducted at 30th June, 1936, as shown in the following table, excludes 53 miles 10 chains of sidings, loops, and cross-overs.

Line.	Route Mileage.	Track Mileage.
Metropolitan—	mls. ch.	mls. ch.
City and Suburban ... ..	114 35	216 77
North Sydney ... ..	23 32	44 57
Ashfield to Mortlake and Cabarita ... ..	8 38	15 9
Rockdale to Brighton-le-Sands ... ..	1 50	1 50
Manly to The Spit and Manly to Harbord and Narrabeen ... ..	11 48	16 36
Kogarah to Sans Souci ... ..	5 45	6 79
Total, Metropolitan ... ..	165 8	301 68
Newcastle City and Suburban ... ..	23 60	41 52
Total, Tramways June, 1936...	188 68	343 40

There has been very little extension of the tramway system in recent years, except the extension of the North Sydney services across the Harbour Bridge to Wynyard Station, which was made on 20th March, 1932. A service by electric trolley bus was commenced in the Metropolitan district in January, 1934, and in July, 1937, a further service replaced the Kogarah-Sans Souci steam tram.

When the tramways were removed from the control of the Railway Commissioners in 1930, the capital indebtedness in respect of the metropolitan tramways was declared by the Transport Act, 1930, to be £7,487,154, and in respect of the Newcastle tramways £944,651, these amounts being subject to revision by a committee of review appointed by the Governor. Interest and sinking fund charges on the capital indebtedness of the tramways are payable to the State Treasury.

The capital cost at 30th June, 1936, amounted to £9,005,789. The cost of construction was £4,991,750, and the expenditure on rolling stock, workshops, machinery, etc., amounted to £4,014,039.

In the following table are given particulars of the miles open, cost of construction, and the financial results of the State tramways at intervals since 1901. The cost of the power stations from which electrical energy is obtained has been excluded from the capital cost of the tramways since August, 1930, when they were transferred to the Railway Commissioners:—

Year ended 30th June.	Total Length of Lines.	Capital Cost.	Gross Revenue.	Working Expenses.	Net Earnings.	*Interest Returned on Capital.
	Miles.	£	£	£	£	per cent.
1901	79½	2,194,403	551,074	462,471	89,203	4·10
1911	189½	5,121,586	1,365,631	1,143,940	221,682	4·53
1921	227½	9,060,757	3,471,738	2,943,252	528,486	5·93
1926	228½	11,434,523	3,619,406	3,319,996	299,500	2·65
1929	210½	11,743,189	4,457,890	3,835,644	622,246	5·33
1930	210½	11,764,978	3,903,470	3,625,564	277,906	2·36
1931	200	8,436,850	3,058,471	3,106,225	(—) 47,754	
1932	192½	8,336,200	3,305,222	3,046,532	258,690	3·10
1933	192½	8,357,582	3,266,847	2,780,871	485,976	5·81
1934	189½	8,565,978	3,237,942	2,533,338	704,604	8·23
1935	189½	9,093,293	3,321,774	2,603,947	717,827	7·84
1936	188½	9,005,789	3,383,530	2,684,652	703,928	7·81
1937	80	9,046,640	3,123,205	2,709,426	713,779	7·87

\* Before charging depreciation—see page 943.

The annual working results as shown in the foregoing table and in the two immediately preceding tables exclude from working expenses charged against gross revenue and appropriations of net earnings provision made in 1933-34 and subsequent years in respect of depreciation and obsolescence of rolling stock and other equipment. The figures thus shown for these years are comparable with earlier periods in which provision for depreciation was not made. In 1933-34 the sum of £209,245 was appropriated as a contribution towards arrears of depreciation, while thereafter current depreciation was charged as a working expense and a further contribution was made towards arrears. The net results as affected by debits for depreciation are shown on page 943.

The receipts increased between 1921 and 1928 by reason of the growth of traffic and increases in fares. In 1929 traffic commenced to fall away, so that receipts from passengers declined, and an important source of revenue was closed in September, 1929, by the cessation of sales of electricity to the Sydney Municipal authorities, in consequence of the opening of the municipal generating station at Bunnerong. The reduction in revenue was not offset by a decrease in working expenses, and the financial results became more and more unsatisfactory until, in 1930-31, working expenses exceeded revenue. In the following year the tramways benefited by restrictions imposed on competitive omnibus services, and by the extension of the North Sydney lines across the Harbour Bridge into the city. Receipts increased and working expenses were curtailed so that there was an excess of earnings amounting to £258,690 in 1931-32, and it rose to £485,976 in 1932-33 notwithstanding a reduction in fares, as from 1st October, 1932. By reason of this reduction, only a moderate increase in receipts occurred up to 30th June, 1937, but working expenses were drastically reduced and net earnings, in excess of £700,000 in the years 1933-34 to 1936-37, were the highest yet recorded.

The percentage of working expenses to the total receipts was 85.12 during the year ending 30th June, 1933, and 79.15 in 1936-37, as compared with 101.56 per cent. in 1930-31 and 92.17 in 1931-32. The net earnings in 1936-37 represented 7.87 per cent. on net indebtedness, or if allowance be made for current depreciation 6.5 per cent., as compared with 3.71 per cent., the average interest payable on the loan liabilities of the State.

A comparative statement of the profit or loss on the tramways after allowing for interest, contributions to sinking fund, and exchange on interest transmitted overseas is shown below:—

Year ended 30th Jnne.	Net earnings. *	Interest.	Sinking Fund.	Exchange.	Profit (+) Loss (—) allowing for interest. †
	£	£	£	£	£
1911 ... ..	221,682	174,055	...	...	(+) 47,627
1921 ... ..	528,486	421,814	...	...	(+) 106,672
1926 ... ..	299,500	577,900	...	...	(—) 278,400
1929 ... ..	622,246	600,000	31,589	...	(—) 9,343
1930 ... ..	277,906	630,150	33,000	...	(—) 385,244
1931 ... ..	(—) 47,754	449,185	26,386	15,170	(—) 538,495
1932 ... ..	258,690	412,700	29,630	106,500	(—) 290,140
1933 ... ..	485,976	387,057	28,000	69,000	(+) 1,919
1934 ... ..	704,604	361,346	33,250	61,390	(+) 248,618
1935 ... ..	712,827	359,040	33,600	50,265	(+) 269,922
1936 ... ..	703,928	352,000	26,609	49,310	(+) 276,009
1937 ... ..	713,779	323,000	37,000	43,400	(+) 310,379

\* Before charging depreciation—see page 943.

Until 1923-24 the tramways usually yielded a substantial surplus over working expenses and interest. Then there occurred a marked expansion in motor transport, and tramway traffic began to decline. Meanwhile interest charges rose continuously, and there were large deficits in 1925-26 and 1926-27. A number of unprofitable lines were closed at the beginning of 1927, and at the end of that year fares were increased. Consequently there was a surplus of £27,808 in 1927-28, though £83,939 had been written off to working expenses on account of the abandoned lines.

In 1928-29 sinking fund charges, £31,589, were debited for the first time, and there was a deficit of £9,343. Then followed three years in which exceptionally large losses were incurred, notwithstanding that savings in interest were considerably in excess of additional heavy charges in respect of exchange. In 1932-33 net earnings expanded and interest and exchange declined, so that there was a small surplus. With further decreases in debt charges the surpluses from 1933-34 to 1936-37 increased from £248,618 to £310,379, from which substantial sums were provided for the depreciation of plant as shown on page 943. The net surplus transferred to accumulated revenue account amounted to £39,373 in 1933-34, to £57,272 in 1934-35, to £60,328 in 1935-36 and to £81,448 in 1936-37.

In the following statement particulars regarding the Metropolitan and Newcastle tramways are shown separately for a period of eight years:—

Year ended June.	Length of line 30th June	Capital Cost.	Gross Revenue.	Working Expenses. *	Net Earnings. †	Interest, Exchange and Sinking Fund.	Profit (+) Loss (—) after paying Interest, Etc.*
Metropolitan Tramways.							
	miles.	£	£	£	£	£	£
1930	176	10,202,850	3,591,171	3,331,745	259,426	574,899	(—) 315,473
1931	176	7,516,845	2,894,285	2,891,834	2,451	435,547	(—) 433,096
1932	169	7,416,739	3,117,334	2,851,449	265,885	488,880	(—) 222,995
1933	169	7,438,171	3,058,696	2,616,153	442,543	431,357	(+) 11,186
1934	167	7,660,987	3,026,962	2,373,574	653,388	406,400	(+) 246,988
1935	166	8,212,939	3,107,760	2,443,418	664,342	397,215	(+) 267,127
1936	165	8,142,822	3,165,730	2,508,685	657,045	385,265	(+) 271,780
1937	165	8,201,326	3,208,871	2,540,955	667,916	362,242	(+) 305,674

Year ended June.	Length of line 30th June.	Capital Cost.	Gross Revenue.	Working Expenses.*	Net Earnings.*	Interest, Exchange and Sinking Fund.	Profit (+) Loss (-) after paying Interest, Etc.*
Newcastle Tramways.							
1930	34½	1,562,128	312,299	293,819	18,480	88,251	(-) 69,771
1931	24	920,005	164,186	214,391	50,205†	55,194	(-) 105,399
1932	24	919,461	187,888	195,083	7,195†	59,950	(-) 67,145
1933	24	919,411	208,151	164,718	43,433	52,700	(-) 9,267
1934	24	904,989	210,980	159,764	51,216	49,586	(+) 1,630
1935	24	880,354	214,014	165,529	48,485	45,690	(+) 2,795
1936	24	862,967	222,850	175,967	46,883	42,654	(+) 4,229
1937	24	845,314	214,334	168,471	45,863	41,158	(+) 4,705

\*Excluding charge for depreciation—see table hereunder.

† Excess of working expenses.

The receipts of the Metropolitan tramways declined by £1,212,242 between 1928-29 and 1930-31, while the reduction in working expenses was only £642,233, so that the net earnings dwindled from £572,460 to £2,451. An important factor in the decline was the loss of receipts from electricity, as noted on page 941, the receipts being £420,880 in 1928-29 as compared with £14,550 received between 1st July and 5th August, 1930, when the power stations were transferred to the railways. Between 1930-31 and 1933-34 working expenses declined by £518,260, and this economy in working has been the principal factor in improved financial results. In the years 1934-35 to 1936-37 working expenses increased by £167,381, but there was a compensating increase of revenue.

The net earnings of the Newcastle services were not sufficient to meet interest charges in the earlier years under review, and in 1930-31 and 1931-32 working expenses exceeded revenue. A substantial improvement has been effected during the last five years, in four of which there were small surpluses over interest charges, exchange, and sinking fund. The receipts from sales of electricity in this district were £125,400 in 1928-29 and £11,841 from 1st July to 5th August, 1930.

Preceding tables furnished a comparison of financial results of the tramways over a series of years, and for this reason excluded charges for depreciation, the practice of providing for which was initiated in 1933-34. The results disclosed in the following table, however, are struck after providing for depreciation charges and appropriations, hence the net earnings and profits are to such extent lessened—

Year ended 30th June.	Gross Revenue.	Working Expenses.		Net Earnings.	Appropriations.		Net Profit.
		General.	Current Deprecia- tion.		Interest, Sinking Fund and Exchange.	Arrears of Deprecia- tion.	
Metropolitan Tramways.							
	£	£	£	£	£	£	£
1934	... 3,026,962	2,373,574	...	653,388	406,400	188,243	58,745.
1935	... 3,107,760	2,443,418	100,134	564,208	397,215	84,870	82,123.
1936	... 3,165,730	2,508,685	125,994	531,051	385,265	65,040	80,746.
1937	... 3,208,871	2,540,955	116,275	551,641	362,242	88,489	100,910.
Newcastle Tramways.							
1934	... 210,980	159,764	...	51,216	49,586	21,002	(-) 19,372.
1935	... 214,014	165,529	6,875	41,610	45,690	20,771	(-) 24,851
1936	... 222,850	175,967	7,360	39,523	42,654	17,287	(-) 20,418
1937	... 214,334	168,471	6,550	39,313	41,158	17,617	(-) 19,462
Total.							
1934	... 3,237,942	2,533,338	...	704,604	455,986	209,245	39,373
1935	... 3,321,774	2,608,947	107,009	605,818	442,905	105,641	57,272
1936	... 3,388,580	2,684,652	133,354	570,574	427,919	82,327	60,328
1937	... 3,423,205	2,709,426	122,825	590,954	403,400	106,106	81,448

(-) Denotes net loss.

The total amount of depreciation written off amounted to £209,245 in 1933-34, to £212,650 in 1934-35, to £215,681 in 1935-36, and to £228,931 in 1936-37. Of the amounts in the three lastmentioned years portion was charged against gross revenue in respect of current depreciation, while the balance represented a contribution towards arrears of depreciation and was not properly chargeable against the revenue of the year. In the Metropolitan tramways a substantial surplus remained after meeting all charges incurred and contributing towards arrears of depreciation. On the other hand, the revenue of the Newcastle tramways was insufficient to meet working expenses, loan charges and current depreciation, and the deficiencies of £4,080 in 1934-35, £3,131 in 1935-36, and £1,845 in 1936-37, thus reckoned, were increased to £24,851, £20,418, and £19,462 respectively by the provision for arrears of depreciation.

Particulars regarding the various groups of metropolitan tramways during 1934-35 and 1935-36 are shown below:—

Particulars.	City and Suburban.	North Sydney.	Manly Lines.	Ashfield Lines.	Rockdale Line.	Kogarah Line (Steam).
1934-35.						
Length ... miles	114.3	23.4	11.6	8.5	1.6	5.6
Cost ... £	6,642,286	943,642	312,694	193,020	43,234	51,339
Car Mileage ... No.	27,865,124	3,742,283	660,848	696,874	137,981	293,188
Passengers ... No.	233,812,854	27,124,086*	5,208,881	7,702,507	1,719,326	2,419,078
Earnings ... £	2,592,789	342,938	63,505	70,829	14,672	23,026
Expenses ... £	2,044,110	244,473	58,071	61,689	9,622	25,611
Net Earnings	£ 548,679	98,465	5,434	9,140	5,050	(—)2,585
Interest and Exchange ... £	295,676	42,966	13,832	8,525	1,712	2,412
Sinking Fund ... £	24,170	3,506	1,125	693	135	199
Depreciation ... £	158,674	9,543	3,549	2,916	1,080	203
Profit ... £	70,159	42,450	...	...	2,123	...
Loss ... £	...	...	13,072	2,994	...	5,399
1935-36.						
Length... ..miles.	114.4	23.4	11.6	8.5	1.6	5.6
Cost ... ..£	6,563,657	961,757	310,116	192,872	43,126	52,878
Car Mileage ... No.	27,498,197	3,468,674	661,516	712,382	130,827	304,417
Passengers ... No.	237,356,110	28,176,830	5,281,843	8,057,618	1,780,319	2,521,674
Earnings ... £	2,632,073	358,881	61,861	74,009	14,930	23,976
Expenses ... £	2,083,687	272,802	50,475	63,099	9,707	28,638
Net Earnings	£ 548,386	86,079	11,386	10,910	5,223	(—)4,662
Interest and Exchange ... £	289,796	43,486	13,686	8,512	1,903	2,293
Sinking Fund ... £	18,931	2,841	894	556	124	150
Depreciation ... £	151,893	21,625	4,087	3,287	1,197	539
Profit ... ..£	87,766	18,127	...	...	1,999	...
Loss ... ..£	...	...	7,281	1,445	...	7,644

\* Exclusive of Sydney Harbour Bridge passengers whose journey did not extend beyond bridge section.

Operations on each of the electric tramway groups resulted in a substantial surplus of receipts over working expenses in both 1934-35 and 1935-36. With the exception of the Manly and the Ashfield lines, the surplus was more than sufficient in both years to meet loan charges and, in addition, to provide for depreciation. The expenses of working the steam tramway at Kogarah have exceeded gross receipts in each year since 1911-12.

*Comparison of Tramway Traffic.*

The following statement contains a comparison of the passenger traffic and the tram mileage since 1901:—

Year ended 30th June.	Length of line open at 30th June.	Passengers.		Tram mileage.	Earnings per tram mile.	Working Expenses per tram mile.
		Tramway Sections.	Sydney Harbour Bridge Section.*			
	miles.	No.	No.		s. d.	s. d.
1901	79½	93,703,685	...	6,835,926	1 7½	1 4½
1911	189½	230,275,938	...	22,541,429	1 2½	1 0½
1921	227½	337,689,873	...	28,654,172	2 5	2 0½
1926	228½	339,411,765	...	34,214,733	2 1½	1 11½
1930	210½	307,789,621	...	32,862,832	2 4½	2 2½
1931	200	266,346,801	...	32,193,040	1 10½	1 11½
1932	192½	284,708,886	2,143,136	35,914,272	1 10	1 8½
1933	192½	287,386,142	8,343,974	36,860,528	1 9½	1 6
1934	189½	286,953,234	9,637,731	36,375,517	1 9½	1 4½
1935	189½	297,773,090	9,793,528	35,996,418	1 10½	1 5½
1936	188½	303,767,139	10,254,475	35,378,335	1 11	1 6½
1937	189	306,833,464	10,375,247	35,200,152	1 11½	1 6½

\* Some of the Sydney Harbour Bridge passengers, viz., those whose journey extended beyond the bridge section, are included also in preceding column.

As a general rule, a single ticket is issued for each passenger journey and the ticket records indicate the number of passengers. An exception is made in regard to journeys across the Sydney Harbour Bridge, where a special ticket is issued for the bridge section (i.e., between Wynyard and North Sydney stations), and a second ticket if the journey extends over any other part of the North Sydney tram lines. In the latter cases the passengers, who received two tickets for their journey, are recorded twice, hence it has not been practicable to state the actual number of passenger journeys since the opening of the bridge in March, 1932. The majority of the Bridge passengers are included also in the number of passengers on the other sections.

The net earnings per tram mile reached the maximum of 4½d. in 1921-22, then declined, the average during the two years ended June, 1927, being only 2½d. It was 4½d. in 1928-29, only 2d. in 1929-30, and in the following year working expenses exceeded receipts by ½d. per mile. Then working expenses were reduced progressively, with the consequence that net earnings per tram mile increased to 1½d. in 1931-32 to 3½d. in 1932-33 and to 4½d. in 1933-34, and each succeeding year.

A dissection of the passengers carried and car mileage as between Metropolitan and Newcastle lines is shown below:—

Year ended June.	Metropolitan Lines.			Newcastle Lines.	
	Passengers.		Car Mileage.	Passengers.	Car Mileage.
	Tramway Sections.	Harbour Bridge Section.			
	000.	000.	000.	000.	000.
1928 ...	325,833	...	31,826	20,181	2,645
1930 ...	293,126	...	30,519	14,664	2,343
1931 ...	253,243	...	29,620	13,104	2,573
1932 ...	267,211	2,143*	33,000	17,498	2,914
1933 ...	268,392	8,344*	34,299	18,994	2,561
1934 ...	267,707	9,638*	33,814	19,246	2,562
1935 ...	277,987	9,793*	33,396	19,786	2,600
1936 ...	283,174	10,254*	32,776	20,593	2,602
1937 ...	286,495	10,375*	32,661	20,338	2,539

\*Some of the Sydney Harbour bridge passengers, viz., those whose journey extended beyond the bridge section are included also in preceding columns.

## TRAM FARES.

The tramways are divided into sections of an average length of nearly 2 miles in the metropolitan district and 1½ miles in Newcastle.

The fares charged on trams since 1st November, 1920, and the dates when alterations were made are shown below:—

Sections.	Date of Alteration—(ordinary rates).				Concession Rates, Mon.-Fri., 10 a.m. to 4 p.m. since December, 1930.
	November, 1920.	December, 1927.	December, 1930.	October, 1932.	
	d.	d.	d.	d.	d.
One ... ..	2	2	2	2	2
Two ... ..	3	4	4	3	3
Three ... ..	4	5	5	4	4
Four ... ..	5	6	6	5	4
Five and six ...	6	6	6	6	4
Harbour Bridge ...	...	...	4*	3	3

\* March, 1932.

The fares on Sundays were higher by 1d. per journey between 1st November, 1920, and 11th February, 1923, when this extra charge was abolished. On 2nd February, 1931, the concession fares for journeys between the hours 10 a.m. and 4 p.m. on week-days (except Saturdays) became general on the Newcastle tramways irrespective of the day or hour of the journey, thus making the maximum fare 4d. for three or more sections.

Children are carried at lower rates. The fare for children under 12 years of age was 1d. for one, two, or three sections, and 2d. for longer journeys, until 1st August, 1934, when the fare was reduced to 1d. per journey for children under 14 years. The Harbour Bridge fare for children is 2d.

Apart from reductions in fares, the cost of travelling by trams has been made cheaper in recent years by the lengthening and overlapping of sections.

## ELECTRIC TROLLEY BUS.

An electric trolley bus service into the city was instituted on 22nd January, 1934. The route mileage extends over a distance of 2 miles 18 chains, and two single-decked and two double-decked buses have been placed in commission. In July, 1937, a further trolley bus service was inaugurated between Kogarah and Sans Souci on the scrapping of the steam tram previously operated.

## PRIVATE TRAMWAYS.

There is only one tramway under private control within the State, viz., a steam line, which passes through the town of Parramatta, commencing at the Park and continuing as far as the Newington Wharf at Duck River, a distance of 2 miles 66 chains. The line has been constructed to the standard gauge of 4 ft. 8½ in., and was opened in 1883.

## RAILWAY AND TRAMWAY WORKSHOPS.

A large number of workshops have been established to meet the requirements of the various branches of the railways and tramways. The principal railway shops are situated at Eveleigh, close to the Central Railway Station, and at Chullora, 11 miles distant. The latter site extends over an area of 485 acres and there is ample room for extensions to meet increasing requirements of the railway system. There are large workshops at Newcastle, Goulburn, and Bathurst to supply the needs of the permanent-way branch by the preparation of structural steelwork, fish-plates,

tools, implements and other articles. Engine repairs are undertaken at Honeysuckle Point (Newcastle) and at a number of smaller workshops in country localities.

The principal tramway workshops are situated at Randwick, in Sydney, and there is a smaller establishment at Newcastle.

Particulars regarding the railway and tramway workshops are published in the chapter of this volume entitled Factories.

#### RAILWAY ELECTRICITY WORKS.

For the supply and distribution of electric current to the railways and tramways there are three main generating stations under the control of the Commissioner for Railways, viz., Ultimo and White Bay in Sydney, and one in Newcastle. A smaller station was opened in January, 1928, at Lithgow, near the State coal mine. A number of substations are in operation throughout the suburban areas.

Particulars regarding the electrical energy generated at each power station and the purposes for which it was used are shown below:—

Particulars.	1933-34.	1934-35.	1935-36.	1936-37.
Generating Stations—	kilowatt hours.	kilowatt hours.	kilowatt hours.	kilowatt hours.
White Bay ... ..	224,232,120	242,622,380	258,604,650	258,760,580
Ultimo ... ..	173,305,517	168,293,849	164,756,122	176,384,274
Newcastle ... ..	71,528,903	85,000,405	104,889,403	114,158,538
Lithgow ... ..	12,429,310	12,749,650	14,243,825	16,247,630
Total ... ..	481,495,850	508,666,284	542,494,000	565,551,022
Purpose of Supply—				
Suburban Railways...	180,643,488	183,355,490	187,246,853	186,832,133
Tramways ... ..	140,748,854	144,542,699	145,495,898	146,660,770
Outside Bodies ...	108,454,958	127,362,874	151,642,817	168,262,418
Balance—Departmental Uses ..	51,648,550	53,405,212	58,108,432	63,795,701
Total ... ..	481,495,850	508,666,284	542,494,000	565,551,022

#### RAILWAY AND TRAMWAY EMPLOYEES AND WAGES.

The average number of persons employed on railways and tramways open for traffic during 1920-21 and later years is shown in the following statement, also the amount of salaries and wages paid. The figures are exclusive of the staff of the construction branch.

Year ended 30th June.	Average number of Employees.			Salaries and Wages paid.		
	Railways.	Tramways.	Total.	Railways.	Tramways.	Total.
				£	£	£
1921 ...	37,558	9,018	46,576	9,153,089	2,278,998	11,432,087
1926 ...	42,174	11,246	53,420	11,192,851	2,947,313	14,140,164
1929 ...	43,972	11,121	55,093	12,422,298	3,121,457	15,543,755
1930 ...	41,342	10,493	51,835	11,656,142	3,005,881	14,662,023
1931 ...	40,620	8,388	49,008	10,167,293	2,119,794	12,287,087
1932 ...	40,329	8,356	48,685	9,637,122	2,015,941	11,653,063
1933 ...	38,881	8,166	47,047	8,462,906	1,772,640	10,235,546
1934 ...	38,174	7,848	46,022	8,154,378	1,664,574	9,818,952
1935 ...	39,637	8,040	47,677	8,782,701	1,737,396	10,520,097
1936 ...	41,779	8,155	49,934	9,775,667	1,813,575	11,589,242
1937 ...	40,331	8,157	48,488	9,626,478	1,845,621	11,472,099

\* Employees in electric power stations classified as tramway employees, 1921-1930, and as railway employees in 1931 and later years.

Particulars relating to the staff of the tramways in the years 1930-31 and 1931-32, shown above, refer to persons employed by the Tramways Management Board in Sydney and Newcastle. When the tramways were separated from the railways in August, 1930, employees, numbering 1,200 (engaged mainly in the supply of electric power for trams), were transferred to the railway staff, and have been classified since as railway employees.

#### COAL SUPPLIES FOR RAILWAYS AND TRAMWAYS.

Coal for use in connection with the railways and tramways is an important item of working expenses, the annual consumption being about 1,400,000 tons. As a result of the gradual electrification of the suburban railways the use of coal for locomotives diminished and the consumption for the generation of electricity increased. The quantity used during each of the last twelve years was as follows:—

Year.	Coal used in Connection with Railways and Tramways.				
	Locomotive Purposes.	Electric Power Stations.	Gas Making.	Other Purposes.	Total.
	tons.	tons.	tons.	tons.	tons.
1925-26	1,342,280	273,244	6,908	46,455	1,668,887
1926-27	1,342,034	326,885	7,437	46,219	1,722,575
1927-28	1,267,823	384,637	7,630	43,946	1,704,036
1928-29	1,212,272	391,904	7,038	45,719	1,656,933
1929-30	1,097,049	370,627	6,471	33,939	1,508,086
1930-31	961,739	340,328	5,615	29,299	1,336,981
1931-32	896,147	332,497	5,744	28,657	1,263,045
1932-33	907,291	350,515	5,079	24,804	1,287,689
1933-34	865,837	345,716	4,702	24,395	1,240,650
1934-35	906,511	362,291	4,875	25,000	1,298,677
1935-36	972,890	390,368	5,140	25,852	1,394,250
1936-37	985,580	402,742	5,260	22,958	1,416,540

#### RAILWAY AND TRAMWAY ACCIDENTS.

All accidents are recorded which occur in the working of the railways and tramways, or on railway or tramway premises, to persons other than railway and tramway employees, however slight the injuries may be. In the case of employees all accidents must be reported which cause the employee to be absent from his ordinary work for at least five hours on any of the three days immediately following the day on which the accident occurred.

The railway and tramway accidents during each year of the quinquennium ended 30th June, 1937, are shown in the following table:—

Year ended 30th June.	Passengers.		Employees.		Others.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
<i>Railway Accidents.</i>								
1933 ...	10	185	17	2,640	57	229	84	3,054
1934 ...	6	177	19	3,085	38	259	63	3,521
1935 ...	7	218	15	3,647	44	252	66	4,117
1936 ...	6	201	20	4,391	55	294	81	4,886
1937 ...	8	217	20	4,678	49	308	77	5,203
<i>Tramway Accidents.</i>								
1933 ...	16	384	2	791	12	175	30	1,350
1934 ...	7	277	6	916	23	275	36	1,468
1935 ...	14	361	2	1,068	19	297	35	1,726
1936 ...	15	400	2	1,063	16	293	33	1,756
1937 ...	13	443	5	1,177	23	270	41	1,890

Most deaths in 1936-37 were caused by the movement of vehicles, the number being 55 in the railways and 40 in the tramways. Injuries to person caused by the movement of vehicles numbered 479 in the railways and 1,409 in the tramways, the injuries arising from other causes being 4,724 and 481 respectively.

The number of passengers carried on the railways during the year ended June, 1937, was 177,837,000, and on the tramways about 313,000,000. The accident rates per million passengers were as follows:—Railways: Killed 0.04; injured, 1.22. Tramways: Killed, 0.04; injured, 1.41. The rates for the railways are usually the higher on account of the greater length of the average journey travelled by railway passengers.

The amount of compensation paid in respect of injuries to passengers and damage to goods during each of the last five years was as follows:—

Accidents.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
<b>Railway—</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>
Passengers ...	3,880	6,943	2,175	7,275	4,536
Goods ...	16,625	15,132	15,187	15,177	18,258
<b>Tramway...</b>	<b>7,267</b>	<b>12,179</b>	<b>14,012</b>	<b>14,845</b>	<b>23,247</b>
<b>Total £...</b>	<b>27,772</b>	<b>34,254</b>	<b>31,374</b>	<b>37,297</b>	<b>46,041</b>

## MOTOR AND OTHER LICENSED VEHICLES.

The use of motor transport vehicles is subject to special laws and restrictions in order that the risk of accidents may be minimised and the flow of traffic regulated where necessary; also to facilitate the collection of taxes for the upkeep of roads, etc. Commercial services by motor vehicles are restricted in a greater degree with a view to reducing competition with the State-owned railways and tramways and ensuring the most economical use of transport facilities available.

Motor vehicles and drivers must be registered and the registrations must be renewed periodically. Persons who apply for a license to drive are required to pass a test as to their ability and they hold their licenses subject to the observance of the motor traffic regulations. Public vehicles, whether motor or horse-drawn, and persons driving them must be licensed if they ply or stand in a public street for hire.

In the transport districts proclaimed under the Transport Act, 1930, the licensing and regulation of public vehicles and drivers and conductors thereof are functions of the Commissioner of Road Transport and Tramways, and he is charged with the registration of other motor vehicles, the licensing of drivers under the Motor Traffic Act, and the collection of taxes and fees.

The police have general authority to take action against dangerous or disorderly traffic. Their services are utilised also by arrangement between the Commissioner of Police and the Commissioner of Road Transport and Tramways, to issue the licenses, to collect the taxes and fees in respect of registered vehicles, and to regulate the street traffic, vehicular and pedestrian, in the metropolitan area.

In municipalities and shires outside the transport districts the local councils are authorised by the Local Government Act to control public vehicles and to enact by-laws for the regulation of street traffic. In other areas, *i.e.*, in the unincorporated portion of the western division of New South Wales, vehicles used to convey passengers for hire must be licensed under the Stage Carriages Act.

In terms of the Transport Act, 1930, the proceeds of the registration and taxation of vehicles and the licensing of drivers, etc., are paid into the Road Transport and Traffic Fund, or the Public Vehicles Fund, or the Main Roads Funds for the purposes shown hereunder.

The fees for the registration of motor and public vehicles, drivers, etc. (except service license fees in respect of motor omnibus services) are payable into the Road Transport and Traffic Fund at the Treasury to meet the cost of police supervision of road transport, administrative and other costs under the Transport Act (except expenses of the transport services conducted by the Commissioner), and expenses relating to traffic facilities and to provide certain contributions to local authorities towards the maintenance of roads used by trams, etc. The credit balance of the Road Transport and Traffic Fund at the end of each financial year is payable to the Country Main Roads Fund.

Annual service license fees payable in respect of motor omnibus services in the transport districts and the taxes on public motor vehicles are paid into the Public Vehicles Fund, which is subject to the control of the Commissioner of Road Transport. The taxes on motor omnibuses and half the service license fees are payable from this fund to the Main Roads Department and to councils of municipalities and shires for the maintenance of roads used by motor omnibuses. The balance of the service licenses fees is applied to the reduction of the capital indebtedness of the tramways.

The tax on public vehicles other than motor omnibuses is expended on resumptions and traffic facilities, and a proportion of the tax on tourist

motor service vehicles operating partly within and partly outside a transport district may be paid to the Country Main Roads Fund. The proceeds of taxation of motor vehicles, other than public vehicles, are paid into the Main Roads Funds, viz., half the taxes paid on vehicles owned by residents of the County of Cumberland to the County of Cumberland Main Roads Fund and the balance to the Country Main Roads Fund. Prior to 1st January, 1936, a deduction of 5 per cent. to cover cost of collection was paid to Consolidated Revenue Fund.

The State Transport (Co-ordination) Act passed in August, 1931, contains provisions which came into force on 2nd November, 1931, by which owners of public motor vehicles, *i.e.*, those used for the conveyance of passengers or of goods for hire or for any consideration or in the course of trade or business, may be required to obtain licenses under this Act in addition to registration under the Motor Traffic and Transport Acts. Exemptions from the obligation to license may be granted by the Commissioner of Road Transport and Tramways, and licenses are not required where permits are issued for carrying passengers over specified routes or in specified districts.

The conditions of any licenses or class of licenses may be prescribed by regulation or determined by the Commissioner of Road Transport and Tramways and charges may be imposed in respect of the transport of passengers and goods by public motor vehicles, the maximum in respect of passengers being 1d. per passenger for each mile or part thereof, or for each section or part thereof (whichever is the greater sum). The maximum rate for goods is 3d. per ton of the aggregate weight of the vehicle unladen and its carrying capacity for each mile or part thereof. The charges on goods are not imposed where a vehicle is used solely for carrying goods to the nearest railway station, and they may be remitted for any reason. The Act prescribes that exemption from the special charges may be granted where a vehicle is used solely for journeys which do not exceed 20 miles, and in July, 1932, exemptions were granted generally for journeys up to 50 miles, also for perishable goods conveyed to market by the producers, irrespective of distance.

Agents for persons operating public motor vehicles and agents in respect of the carriage of persons or goods, otherwise than by ship, are required to obtain licenses and to renew them annually.

The charges imposed in respect of the transport of passengers and goods by public motor vehicles and fees for licenses and permits are paid into the State Transport (Co-ordination) Fund at the Treasury, from which may be paid costs of administration and subsidies for motor services which are feeders to railways or tramways. With the Minister's approval payments may be made from the fund to the Government Railways Fund or to the tramways funds.

The annual fees for the registration of motor vehicles, etc., to be paid on the issue of a license and on each annual renewal are as follows:—Motor cycle 2s. 6d., other motor vehicle £1, driver 10s., motor cycle rider 5s. For a learner's permit to drive 5s. is charged. Annual fees for traders' plates are £2 for motor cycles and £8 for other motor vehicles.

The maximum fee which may be charged by local councils in respect of the license of a public vehicle is £1 per annum, and for a driver's license 5s. per annum.

Until December, 1932, certificates of registration were current for twelve months from the date of issue, and the tax for that period was paid at the time of registration or renewal. Under existing arrangements, dating from 1st December, 1932, registration may be affected for quarterly periods and the tax paid in quarterly instalments at the option of the owners. The charges in such cases are proportionately higher than for annual registration. Visible labels must be attached to all registered motor vehicles.

A statement showing the number of vehicles on the register at various dates is shown below. The usefulness of the figures for purposes of comparison is circumscribed by several factors. For instance, the number of registered vehicles as at 31st October, 1931, was reduced by 3,261—viz., 1,938 cars, 565 lorries and 758 cycles—as a result of a revision of the records which disclosed that the method formerly used for assessing the monthly figures had led to overstatement. A similar revision was made in February, 1932, in respect to the vehicles classified in the table as public vehicles, i.e., cabs, vans and omnibuses, and a number of omnibuses which had ceased to ply after the State Transport (Co-ordination) Act became law were removed from the register. Government vehicles—numbering about 1,700—were included for the first time in July, 1932.

End of year or month.	Registrations in force.								
	Car.	Van or Lorry.	Cycle.	Metropolitan Public Vehicles*.		Trader's Plate.	All Motor Vehicles.	Per 100 of popu- lation.	
				Cab.	Ombi- bus.			Cars only.	All Motor vehicles.
1911 ...	3,975	3	2,788	175	4	...	6,945	0.23	0.41
1916 ...	14,175	877	7,070	268	12	254	22,656	0.75	1.20
1921 ...	28,665	3,900	11,291	407	180	413	44,856	1.34	2.10
1926 ...	104,675	24,709	25,424	779	486	1,320	157,393	4.40	6.62
1929 ...	170,039	44,868	30,655	1,364	612	2,022	249,560	6.75	9.90
1930 ...	164,169	44,464	27,258	1,221	523	1,593	239,228	6.45	9.39
1931 ...	144,749	39,226	23,124	1,091	776	458	209,424	5.64	8.16
1932 ...	147,043	41,897	23,037	1,068	360	429	213,834	5.67	8.25
1933 ...	152,851	46,615	22,751	1,052	450	492	224,211	5.85	8.68
1934—June	155,063	48,601	22,571	1,051	456	582	228,324	5.91	8.71
Dec.	161,342	52,581	22,793	1,053	488	655	238,912	6.12	9.06
1935—June	164,483	54,919	22,777	1,055	503	691	244,428	6.22	9.24
Dec.	172,156	59,614	23,119	1,063	526	776	257,254	6.48	9.68
1936—June	177,289	62,149	23,048	1,113	528	851	264,978	6.65	9.94
Dec.	183,406	67,257	23,418	1,155	567	909	276,712	6.84	10.32
1937—June	189,794	70,341	23,439	1,169	594	1,005	286,342	7.05	10.63

\* Includes Newcastle Transport District in 1930 and later years.

The figures demonstrate the remarkable development of motor transport. Expansion took place at an increasing rate until 1927, after which annual increases on a diminishing scale gave way to rapid recession in the second quarter of 1930. The decline persisted throughout 1931 and the first half of 1932, and as a consequence the number of vehicles fell by more than 40,000. Registrations tended to increase during the latter half of 1932, and in December a net addition of 2,961 vehicles to the register was due probably in some measure to the provision of facilities for the payment of charges in quarterly instalments and to the introduction of visible registration labels. Annual increases since June, 1932, numbered 8,879 vehicles in 1932-33, 12,267 in 1933-34, 16,014 in 1934-35, 20,550 in 1935-36, and 21,364 in 1936-37; as a result the record number of vehicles in the early months of 1930 was exceeded towards the end of 1935. The number of vehicles per 1,000 of population attained a maximum of about 100 early in 1930; it declined thereafter and did not again exceed 100 until the second half of 1936.

The figures relating to omnibuses on the register from December, 1930, to January, 1932, inclusive, do not indicate the number of such vehicles in use. When the Transport Act, 1930, was proclaimed action regarding the renewals of registration was delayed in some cases so that the persons conducting the services might make arrangements for insurance, etc., as prescribed by the Act. Subsequently, when the State Transport (Co-ordina-

tion) Act became law, a number of services were discontinued at the end of October, 1931, but the vehicles were not removed from the register until February, 1932.

The number of motor vehicles registered during each year from 1927 is shown in the following statement, with separate details regarding new vehicles and old vehicles registered after a change of ownership. Renewals of registration are not included:—

Year.	Registrations of Motor Vehicles (excluding renewals).										
	Cars.		Lorries and Vans.		Metropolitan Public Vehicles*				Total (excluding Cycles).		Cycles (new and old).
					Cabs.		Omnibuses.				
	New.	Old.	New.	Old.	New.	Old.	New.	Old.	New.	Old.	
1927	30,757	11,094	9,157	3,657	215	142	105	88	40,234	14,981	9,716
1928	30,188	12,812	7,497	4,537	156	213	66	78	37,907	17,640	11,288
1929	26,825	13,888	8,477	5,131	213	209	86	59	35,601	19,287	10,579
1930	11,152	13,197	4,172	5,936	79	158	57	34	15,460	19,325	8,098
1931	3,273	16,560	1,260	7,104	7	99	16	51	4,556	23,814	7,681
1932	3,645	20,531	937	9,478	...	35	1	36	4,583	30,080	7,864
1933	5,709	21,440	2,400	11,787	15	132	13	209	8,137	33,568	8,490
1934	10,776	19,265	4,527	12,437	308	182	43	77	15,654	31,961	8,481
1935	15,061	18,247	6,630	12,200	573	123	53	69	22,317	30,639	8,180
1936	18,836	18,358	8,447	12,797	502	126	101	61	27,886	31,342	7,796

\* Registrations in Newcastle district included as from 13th October, 1930.

The registration of new vehicles, other than cycles, was at a high level during each of the years 1927 to 1929. The number then declined steeply, and in 1931 and 1932 was about one-eighth of its former magnitude. Though six times the number in 1932, new registrations in 1936 represented only 73 per cent. of the average number during the three years 1927 to 1929.

The registration of second-hand vehicles after change of ownership increased up to 1933, the movement being most marked in those years during which new car figures were at a minimum. With the substantial recovery of new car registrations, the registration of second-hand vehicles after change of ownership has been comparatively steady. There was a notable increase in new cab registrations after 1933.

#### MOTOR DRIVERS' LICENSES.

The development in motor transport facilities is illustrated also by the following statement of the number of annual licenses to drive motor vehicles issued during the years specified:—

Year.	Annual Licenses Issued.				
	Metropolitan Public motor vehicles.*			Other motor vehicles.	
	Cab drivers.	Omnibus.		Car, Van and Lorry drivers.	Cycle riders.
		Drivers.	Conductors.		
1911	248	6	9	5,526	3,323
1916	387	21	5	22,645	9,444
1921	627	441	200	53,061	16,115
1926	2,174	1,926	1,118	185,874	32,228
1929	1,997	2,107	1,077	300,205	36,784
1930	1,989	1,981	958	305,165	33,935
1931	1,663	1,856	849	280,014	29,794
1932	1,699	1,327	352	275,232	28,739
1933	1,867	1,443	277	282,337	28,455
1934	2,060	1,498	234	296,096	28,132
1935	2,681	1,695	242	324,903	28,971
1936	3,267	1,812	339	347,584	28,995

\* Newcastle district included in 1930 and later years.

## TAXATION OF MOTOR VEHICLES.

A tax is levied on every motor vehicle and it must be paid annually by the person in whose name the vehicle is registered, when the certificate of registration is issued or renewed. The rates of tax are based upon the weight of the vehicle and the type of tyre used, except in the case of motor cycles. Prior to 1st January, 1925, they were fixed in relation to horse-power.

The rates per  $\frac{1}{2}$  cwt. imposed upon vehicles with solid tyres are as follow:—Car, 3s. 3d., lorry 3s. 6d., omnibus 5s. 6d. If the tyres are pneumatic, semi-pneumatic rubber, or super-resilient, the rate for a car or lorry is 2s. 9d. per  $\frac{1}{2}$  cwt., and for an omnibus 4s. 3d. per  $\frac{1}{2}$  cwt. The tax on a motor cycle is 22s. 6d., or if a side car is attached £2. For tractors the rate is 3s. 6d. per  $\frac{1}{2}$  cwt. up to a maximum of £15. Trailers and other motor vehicles are taxable at the rate of 3s. 6d. per  $\frac{1}{2}$  cwt. Tractors, motor lorries, and other motor vehicles owned by farmers and used solely for carting the produce of their farms are taxable at half-rates. A reduction of 6d. per  $\frac{1}{2}$  cwt. is allowed on vehicles of British manufacture.

The following are exempt from taxation, viz.:—Ambulance motor vehicles; those used by manufacturers or dealers for trial purposes; and so much of the weight of a motor vehicle used solely for mining purposes in the Western Division of the State as exceeds 5 tons; motor vehicles owned by the council of a municipality or shire and used solely for the purposes of road construction, maintenance, or repair, on public parks and reserves and in cleansing and sanitary services; road making equipment of private contractors; trailers and motor vehicles used solely for work on farms; trailers owned by farmers and used solely for carting the produce of their farms, or owned by timber-cutters and used solely for carting their timber from forest to mill.

The tax and registration fee (£1) payable annually for a British-made car or light lorry of a type in common use, weighing 25 cwt. is £6 17s. or if the vehicle is of foreign manufacture £8 3s. If registration is effected quarterly the tax for four successive quarters amounts to £1 17s. 3½d. or £2 5s. 7d. per quarter according to country of origin, and the registration fee is £1 for the first quarter and 5s. for each subsequent quarter, while registration is continuous.

## REGISTRATION FEES AND MOTOR TAX.

The total receipts from the taxation of motor vehicles and the registration and licensing of vehicles, drivers, etc., during each of the last ten years, as recorded by the Police Department and the Commissioner of Road Transport, are shown below:—

Year.	Motor Vehicles Tax.	Fees for Registration and Licences.	Miscellaneous.	Total.
	£	£	£	£
1927 ...	1,035,639	320,388	2,002	1,358,029
1928 ...	1,246,424	381,881	2,682	1,630,987
1929 ...	1,386,565	419,020	3,147	1,808,732
1930 ...	1,345,801	406,151	3,194	1,755,146
1931 ...	1,201,598	417,804	4,909	1,624,311
1932 ...	1,185,252	421,340	5,135	1,611,727
1933 ...	1,233,982	436,436	5,351	1,675,769
1934 ...	1,366,598	486,390	6,110	1,859,098
1935 ...	1,527,429	526,120	4,701	2,058,250
1936 ...	1,658,691	597,340	4,557	2,260,588

The rates of taxation in respect of motor vehicles were raised on 1st January, 1925, and this was a factor in the increase of revenue from £424,900 in 1924 to £867,180 in 1925. Revenue declined during the years 1930 to 1932, but rose thereafter, the previous maximum amount in 1929 being exceeded in 1934. The imposition of motor omnibus service license fees, viz., £39,493 in 1931, £8,167 in 1934, £8,695 in 1935, and £11,505 in 1936; and fees, etc., under the State Transport (Co-ordination) Act, viz., £14,027, £44,546, £52,680, and £84,666, respectively, contributed to the revenues in recent years.

#### MOTOR OMNIBUS SERVICES.

The motor omnibus services in the Metropolitan and Newcastle Districts are subject to provisions of the Transport Act, 1930, and the Transport (Co-ordination) Act (see pages 906 and 950). The vehicles, drivers and conductors are registered annually, and an annual service license must be obtained for each service. Where a service would come into competition with railway or other transport services, conditions may be imposed with a view to preventing undue competition or overlapping. The registration of each omnibus is conditional upon fitness, the observance of regulations regarding design and construction, and provision for the safety and comfort of passengers. Owners of motor omnibuses are required to insure against liability by way of damages in the case of injury to persons or property. The amount of insurance is fixed at £5,000 in respect of each omnibus, but it may be reduced to £1,000 where there are special circumstances, or a comprehensive policy for £15,000 may be accepted from an owner in respect of all his omnibuses.

The annual fee for each service license is fixed with regard to the nature and extent of the benefit enjoyed by the holder of the license, the nature of the route traversed and the effect on State-owned transport services, the maximum fee being an amount equivalent to £4 for each passenger each omnibus is authorised to carry. The fee for experimental or developmental or unprofitable services may be fixed at a nominal rate.

On 2nd November, 1931, the omnibus services became liable to pay special charges under the Transport Co-ordination Act ranging up to 1d. per mile or part of a mile for each passenger, or 1d. for each section or part of a section included in each passenger's journey, whichever is the greater.

Under the Transport Act owners of motor omnibuses for which a license was in force at the commencement of the Act were entitled to a service license for the existing services for a period of one year without variation as to fares or time-tables. For this reason action by the administrative authority towards the elimination of overlapping services was delayed until the year 1931. Then the maximum fee for a service license was imposed where the omnibus service was competing with the tramways. As a result a number of owners in the Newcastle district declined to pay the fees, and their licenses were cancelled in October, 1931. In the metropolitan district the services were maintained until the imposition of additional charges under the State Transport (Co-ordination) Act in November, 1931, led to the discontinuance of a large proportion of the services.

In the following year, after the matter had been investigated by an Advisory Committee, the Government decided to establish a number of motor omnibus services in the metropolitan district. Vehicles and

equipment formerly used by private owners were purchased, and the first service was commenced in December, 1932. At 30th June, 1936, there were 25 Government services operating a route mileage of 188½ miles; capital indebtedness to the Treasury amounted to £72,436; 142 omnibuses were registered and staff employed numbered 724. The profit realised during the year ended 30th June, 1936, amounted to £29,043 as compared with £9,748 in 1934-35. The revenue in 1935-36 totalled £369,166 and expenditure £327,498, including payments to the Co-ordination Fund £9,055, provision for depreciation £44,234 and interest, sinking fund and exchange £3,570. Bus miles run aggregated 5,110,602 and passengers carried numbered 23,782,779.

Particulars of the motor omnibus traffic in the metropolitan district were collected for the first time in 1929, and in Newcastle in 1931. A summary of the information supplied by the proprietors for the years ended 30th June, 1929, to 1936, is shown below. The figures for 1932-33 and subsequent years include the Government services in the metropolitan district; in the Newcastle district they relate to privately operated services, as the Government buses are operated in conjunction with the tramways and separate particulars are not available.

Year.	Licensed Omnibuses at end of Period.			Omnibus Miles Run.	Passengers Carried.	Revenue.	Expenditure.	
	Number in Service.	Number in Reserve.	Carrying Capacity. (Persons).					
Metropolitan District.						£	£	
1928-29	...	480	92	13,665	16,911,793	89,845,001	1,446,876	1,293,437
1929-30	...	492	132	15,376	19,227,383	94,481,982	1,540,456	1,256,773
1930-31	...	483	107	17,908	19,548,162	92,125,207	1,357,505	1,352,649
1931-32	...	252	55	7,623	11,012,921	43,544,551	624,102	668,117
1932-33	...	295	89	10,561	8,896,123	31,630,012	419,501	437,313
1933-34	...	353	58	11,008	10,993,037	39,075,930	540,226	530,760
1934-35	...	375	79	13,878	11,874,593	45,096,140	608,993	591,922
1935-36	...	410	63	14,760	13,121,316	51,276,609	703,028	665,196
Newcastle District.								
1930-31	...	83	10	2,551	3,113,477	8,248,000	140,110	139,914
1931-32	...	46	9	1,437	1,915,747	3,758,928	68,270	78,225
1932-33	...	45	7	1,231	1,390,957	2,579,712	48,928	53,350
1933-34	...	46	7	1,333	1,344,777	2,671,246	49,537	48,323
1934-35	...	49	8	1,465	1,418,638	2,877,176	52,107	50,372
1935-36	...	49	18	1,764	1,523,953	3,276,383	59,871	56,828

The number of persons employed in connection with the metropolitan motor omnibus services at 30th June, 1936, was 1,359, viz., 43 office employees, 1,078 drivers and conductors, 12 inspectors and checkers, and 226 other employees. The employees in the Newcastle district numbered 122, of whom 99 were drivers or conductors.

An analysis of the expenditure of the metropolitan services during the year ended June, 1936, shows that management expenses amounted to £92,454, wages to £243,013, stores and materials to £158,572, and repairs, depreciation and interest to £171,157. Similar details for the year 1934-35 were £79,065, £214,525, £146,815, and £151,517, respectively.

## TRAFFIC ACCIDENTS.

The following table shows for various years from 1911 particulars of accidents which occurred in public streets within the Metropolitan Traffic District and were reported by the Police:—

Year.	Accidents in which no persons were injured.	Persons Killed or Injured in Accidents caused by--				Total Number of Persons.	
		Trams.		Motor Vehicles.			
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1911	963	10	633	5	130	28	1,212
1921	1,199	10	318	36	792	62	1,616
1926	7,360	11	303	144	3,660	187	4,861
1928	9,399	9	415	185	5,612	212	6,881
1929	10,864	10	374	239	6,243	272	7,299
1930	8,825	7	335	220	5,627	238	6,388
1931	6,757	14	483	184	4,492	210	5,371
1932	4,770	18	433	151	3,928	185	4,817
1933	1,741	18	255	161	3,240	208	4,129
1934	2,341	19	323	173	3,738	228	4,906
1935	3,008	20	326	191	3,864	248	5,135
1936	4,264	12	176	151	3,021	297	5,246

The number of persons killed or injured in tram accidents, as shown above, does not include accidents due to persons getting on or off trams in motion, though these are included in the total. Until the end of 1935 persons killed and injured in accidents attributable to pedestrians and passengers in vehicles were classified according to the type of vehicle involved. In 1936, however, 73 persons killed and 1,049 persons injured in accidents attributable to pedestrians and passengers were classified separately, hence they are included in the total column only and not in the columns for trams and motor vehicles. It is primarily by reason of this change of classification that casualties under the heads of trams and motor vehicles decreased in 1936. Administrative changes introduced into the Police Department in September, 1932, have tended to restrict the number of reports of accidents received by the police.

For the years ended 30th June, 1934, onward, statistics of traffic accidents on a State-wide basis are available in greater detail. Thus the following statement shows for New South Wales the total number of accidents reported and casualties that resulted therefrom:—

Year ended 30th June.	Accidents reported.	Casualties in each Area.							
		Metropolitan.		Newcastle.		Country.		Total N.S.W.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1934	No.	No.	No.	No.	No.	No.	No.	No.	No.
1934	7,281	205	4,356	22	263	92	889	319	5,508
1935	8,786	239	5,064	28	281	137	1,141	404	6,486
1936	9,833	289	4,850	30	250	200	1,345	519	6,445

The deaths per 100,000 of population in 1935-36 were 19.6 as compared with 15.3 in 1934-35, and 12.2 in 1933-34, and corresponding ratios for less serious injuries were 242.7, 246.9 and 234.9 respectively. Though it is not possible to reflect with any degree of precision variations in the volume of traffic using the roads, the increase of persons killed per 1,000 vehicles registered from 1.07 in 1933-34, to 1.68 in 1934-35, and to 2.07 in 1935-36, and of persons injured from 19.9 to 26.9 and 25.6 suggests that casualties increased in greater proportion than the volume of road traffic.

The victims of accidents classified according to pedestrians and occupants of vehicles were as follow:—

Year ended 30th June.	Pedestrians.		Drivers and Passengers.		Proportion of Pedestrians to Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
	No.	No.	No.	No.	Per cent.	Per cent.
1934 ... ..	121	1,981	198	3,527	37·9	35·9
1935 ... ..	159	2,254	245	4,232	39·3	34·7
1936 ... ..	164	1,908	355	4,537	31·6	29·6

According to an analysis of the causes of accidents, 73.3 per cent. of the fatalities in 1935-36 were attributable to human failure, 7.8 per cent. to defective vehicles, and 15.9 per cent. to road and weather conditions. Fatalities attributable to human failure embraced 47 per cent. due to driver or rider, 21.1 per cent. to pedestrians and 5.2 per cent. to passengers. Of causes attributed to the fault of driver or rider, excessive speed was responsible for 91 deaths, skidding for 43, failure to keep to left 30, overtaking improperly 12, negligence 37, and intoxication 26. Determination of the causes of accidents is, of necessity, arbitrary, and because there are a number of contributory causes in many instances the accidents are recorded under more than one heading. The figures quoted are, nevertheless, indicative of the relative importance of the various factors involved in road traffic accidents.

The following table shows for 1935-36 the number of accidents in which the various classes of vehicles, etc., were involved and the accidents and casualties for which they were responsible:—

Class.	Accidents in which involved.	Accidents for which responsible.		Casualties for which responsible.			
		Number.	Pro- portion.	Killed.		Injured.	
				Persons.	Pro- portion.	Persons.	Pro- portion.
	No.		Per cent.		Per cent.		Per cent.
Car ... ..	6,215	3,650	37·1	167	32·2	2,173	33·7
Lorry and Van ... ..	2,407	1,276	13·0	64	12·3	577	8·9
Motor-cycle ... ..	866	514	5·2	39	7·5	485	7·7
Motor-cycle and Side-car	337	200	2·0	16	3·1	184	2·9
Omnibus... ..	220	79	0·8	2	0·4	22	0·2
Taxi-cab ... ..	1,520	634	6·5	4	0·8	126	1·9
Tram ... ..	1,019	291	3·0	1	0·2	95	1·5
Horse Vehicle ... ..	321	153	1·5	13	2·4	81	1·3
Bicycle ... ..	1,350	936	9·5	63	12·2	790	12·3
Pedestrian ... ..	2,024	1,676	17·1	124	23·9	1,576	24·4
Tram Passengers ... ..	265	261	2·6	16	3·1	219	3·4
Animal ... ..	129	106	1·1	9	1·7	70	1·1
Other ... ..	90	57	0·6	1	0·2	47	0·7
Total ... ..	...	9,833	100·0	519	100·0	6,445	100·0

These figures should be considered in conjunction with the number of motor vehicles registered, as shown on page 952. In this respect the persons killed and injured in 1935-36 per 1,000 vehicles of each type to which responsibility was attributed were, respectively, cars 1.0 and 12.9, lorries 1.1 and 10.1, omnibuses 3.9 and 43.0, taxi-cabs 3.7 and 117.8, and motor cycles—solo and pillion—2.5 and 30.8, and with side-car 2.2 and 25.9. The high ratios for omnibuses and taxi-cabs would be accounted for by the fact that relatively small numbers of these vehicles are engaged continuously in passenger services within densely-populated areas.

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